AV-27850
AV-27870

JVC

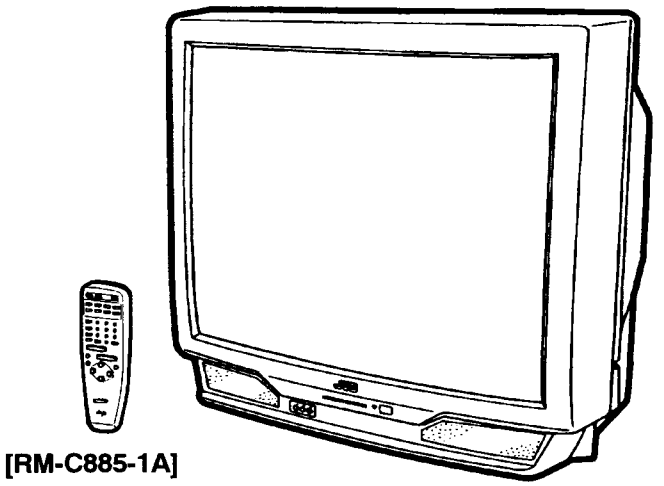
SERVICE MANUAL

COLOR TELEVISION

BASIC CHASSIS
FK

AV-27850 (US&CA)

AV-27870 (US&CA)



[RM-C885-1A]

[AV-27870]

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No. 51213
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SPECIFICATIONS

Items	Content
Dimensions (W × H × D)	25-3/4" × 23-3/8" × 20-1/2" / 65.4cm × 59.1cm × 51.8cm
Mass	67.9 lbs / 30.8 Kg
Reception Format	NTSC, BTSC System (Multi Channel Sound)
Reception Range	
(Receiving Channels and Frequency)	
VL Band	(02~06) 54MHz~88MHz
VH Band	(07~13) 174MHz~216MHz
UHF Band	(14~69) 470MHz~806MHz
CATV Channels and Frequency	
Low Band	(02~06, A-8) by (02~06 & 01)
High Band	(07~13) by (07~13)
Mid Band	(A~I) by (14~22)
Super Band	(J~W) by (23~36)
Hyper Band	(W + 1~W + 28) by (37~64)
Ultra Band	(W + 29~W + 84) by (65~125)
Sub Mid Band	(A8, A1~A4) by (01, 96~99)
	(54MHz ~ 804MHz)
Closed Caption System	C1, C2, F1, F2 Available
Intermediate Frequency	
Video IF Carrier	45.75MHz
Sound IF Carrier	41.25MHz (4.5MHz)
Color Sub Carrier	3.58MHz
Power Input	120V AC, 60Hz
Power Consumption	120W (US) / 1.5A (CA)
Picture Tube	
Screen Size	27inch / 68cm , Measured Diagonally, Full square
High Voltage	29kV ±1.3kV (at zero beam current)
Surround System	Build in HYPER SURROUND system
Audio Power Output	3W + 3W
External Input (1, 2)	Video : 1Vp-p, 75Ω Audio : 500mVrms(-4dBs), High impedance (Input 2 : bridge connection [AV-27870(US&CA)])
S-Video Input	Y : 1Vp-p positive, 75Ω (Negative sync provided) C : 0.286Vp-p(burst signal), 75Ω
Audio Output	Variable : More than 0 to 1550mVrms(+6dBs) / Fix : 500mVrms(-4dBs) Low impedance(400 Hz when modulated 100%)
AV Compu Link	3.5mm mini jack × 2
Speakers	2" × 4-3/4", 5cm × 12cm oblong Type × 2
Antenna Input Impedance	75Ω (VHF/UHF) Terminal, F-Type Connector
Remote Control Unit	RM-C745-1C (AA batteries × 2) : [AV-27850(US&CA)] RM-C885-1A (AA batteries × 2) : [AV-27870(US&CA)]

Design & specification are subject to change without notice.

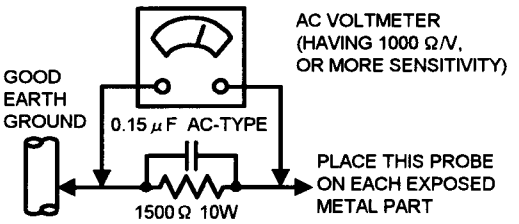
SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
4. **Use isolation transformer when hot chassis.**
   The chassis and any sub-chassis contained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.
5. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.
6. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
7. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
8. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
9. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.
10. **Isolation Check**
    (Safety for Electrical Shock Hazard)
    After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1100V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

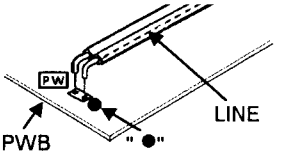
● **Alternate Check Method**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.35V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).



11. **High voltage hold down circuit check.**
    After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly.
    See item "**How to check the high voltage hold down circuit**".

This mark shows a fast operating fuse, the letters indicated below show the rating.

POWER CORD
REPLACEMENT WARNING.
Connecting the line side of power card to " ●"mark side.



FEATURES

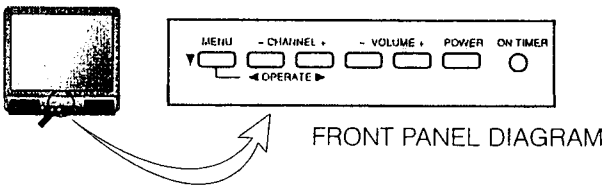
- New chassis design enables use of single board with simplified circuitry.
- Comb filter improved picture quality.
- Provided with 2 tuner (TV/CATV, PIP)
- Full-square CRT reproduces fine textured picture in every detail.
- PLL synthesizer system for channel tuning.
- AV COMPU LINK EX terminals allow simultaneous mode switching of the TV, connected receiver (or amplifier) and / or VCR.
- TELETEXT broadcast can be viewed.
- With AUDIO, VIDEO input terminal.
- By the sound multiplex broadcast with MTS system, you can enjoy music programs and sporting events with live realism.
- S-VIDEO input terminal for taking best advantage of Super VHS.
- Variable audio output terminal.
- I^2C bus control utilities single chip ICs.
- By selecting the THEATER STATUS picture, you can enjoy pictures with powerful effects.
- The HYPER-SURROUND system makes a reproduction of the acoustic effects in a theater with strong appeal.

MAIN DIFFERENCE LIST BETWEEN AV-27850 AND AV-27870

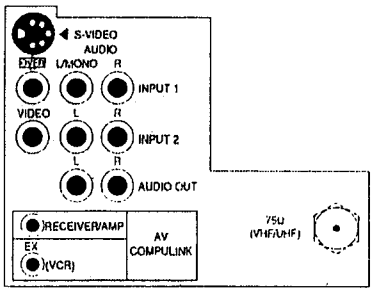
⚠	Part name	AV-27850(US)	AV-27850(CA)	AV-27870(US)	AV-27870(CA)
	MAIN PWB	SFK-1001A-M2	←	SFK-1002A-M2	←
	AV SELECTOR PWB	SFK-8005A-M2	←	SFK-8003A-M2	←
	FRONT AV JACK PWB	×	×	SFK0J001A-M2	←
⚠	FRONT CABI.	CM12919-A01-MA	←	CM12919-A02-MA	←
⚠	RATING LABEL	CM23034-001-A	CM22999-001-A	CM23034-001-A	CM22999-001-A
	REGI. CARD	BT-51006-1Q	×	BT-51006-1Q	×
⚠	INST. BOOK (ENGLISH)	CQ40343-001-A	←	CQ40334-001-A	←
⚠	INST. BOOK (FRENCH)	×	CQ40344-001-A	×	CQ40335-001-A
	SVC CENTER LIST	×	BT-20071B-Q	×	BT-20071B-Q
	WARRANTY CARD	×	BT-52002-1Q	×	BT-52002-1Q
	REMOTE CONTROL UNIT	RM-C745-1C	←	RM-C885-1A	←

FUNCTIONS [AV-27850(US&CA)]

FRONT AND REAR PANEL DIAGRAMS



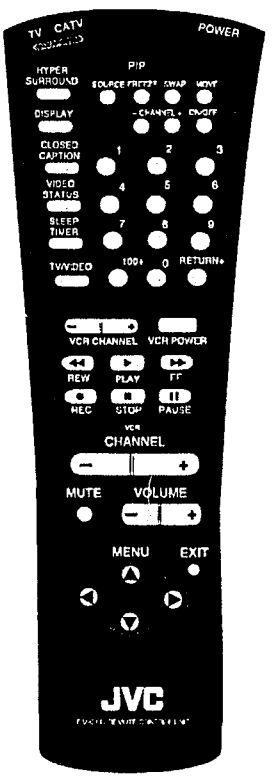
FRONT PANEL DIAGRAM



REAR PANEL DIAGRAM

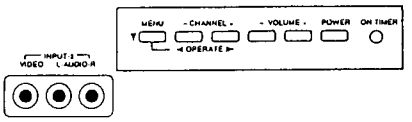
REMOTE CONTROLS

RM-C745

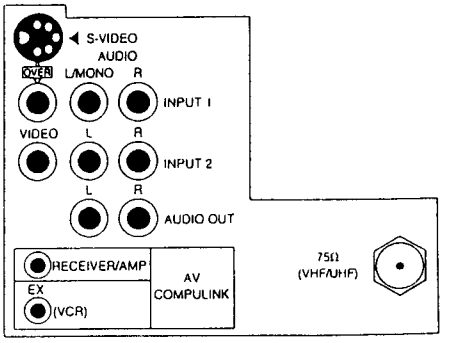


FUNCTIONS [AV-27870(US&CA)]

FRONT AND REAR PANEL DIAGRAMS



FRONT PANEL DIAGRAM

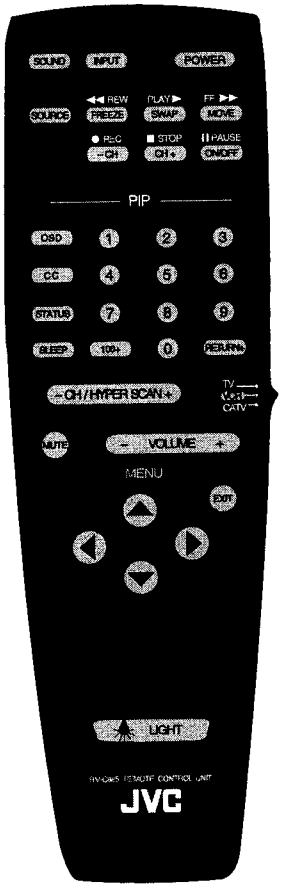


REAR PANEL DIAGRAM
Common to all models in this book.

Note: You can use either the front panel AV Input, or the Rear Input 2, but not both simultaneously.

REMOTE CONTROL

RM-C885



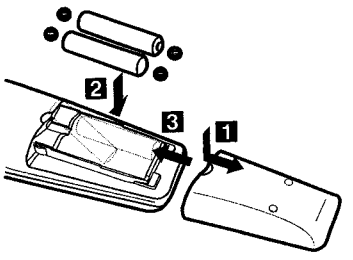
THE ILLUMINATED REMOTE

This remote control is not only good looking, it's bright! Press the Light button and every button lights up so you can see exactly what button you are pressing even in a dark room.

Changing and Inserting Batteries.

Use only size AA batteries.

1. Push down on the triangle on the remote's back cover, and slide the cover off to remove it.
2. Insert the two supplied AA batteries, carefully noting the "+" and "–" markings on the batteries and remote control. **To avoid a short circuit, insert "–" end first.**
3. Snap the cover back into place.



NOTES:

- *Once the batteries are in the remote and you have confirmed that the remote is working, you must program the remote to operate your particular brand of VCR and/or cable box. Turn to page 12 now and follow the instructions.*
- *If it takes you more than 50 seconds to change the batteries, you might have to reprogram the CATV and/or VCR codes described on page 12.*
- *If the remote control acts erratically, replace the batteries. Battery life is usually six months to one year.*
- *We recommend the use of alkaline batteries for longer battery life.*

SPECIFIC SERVICE INSTRUCTIONS

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

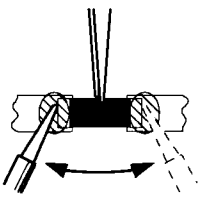
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

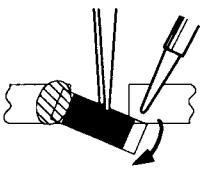
1. How to remove Chip parts

◆ **Resistors, capacitors, etc.**

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

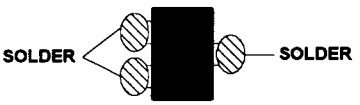


(2) Shift with tweezers and remove the chip part.

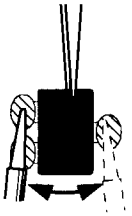


◆ **Transistors, diodes, variable resistors, etc.**

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

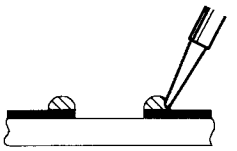


Note : After removing the part, remove remaining solder from the pattern.

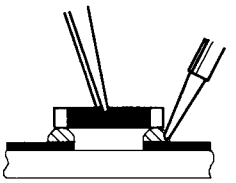
2. How to install Chip parts

◆ **Resistors, capacitors, etc.**

(1) Apply solder to the pattern as indicated in the figure.



(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

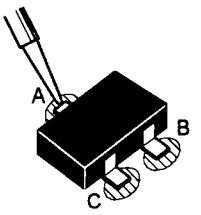


◆ **Transistors, diodes, variable resistors, etc.**

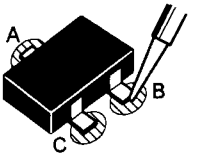
(1) Apply solder to the pattern as indicated in the figure.

(2) Grasp the chip part with tweezers and place it on the solder.

(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power supply cord.
2. Remove the 9 screws marked **A** as shown in Fig.2.
3. Remove the rear cover toward you.

When reinstalling the rear cover, carefully push it inward after inserting the chassis into the rear cover groove.

REMOVING THE CHASSIS

- After removing the rear cover.

1. Slightly raise the both sides of the chassis by hand and remove the 2 claws under the both sides of the chassis from the front cabinet.
2. Draw the chassis backward along the rail in the arrow direction marked **B** as shown in the Fig.2.
   (If necessary, take off the wire clamp, connectors etc.)

When conducting a check with power supplied, be sure to confirm that the CRT earth wire is connected to the CRT SOCKET PWB and the MAIN PWB.

REMOVING THE FRONT AV JACK PW BOARD

[Only for AV-27870(US&CA)]

- After removing the rear cover and chassis.

1. Remove the 2 screws marked **C** as shown in Fig.2.
2. Then remove the FRONT AV JACK PW BOARD toward you.

REMOVING THE FRONT CONTROL PW BOARD

- After removing the rear cover and chassis.

1. Remove the 2 screws marked **D** as shown in Fig.2.
2. Remove the FRONT CONTROL PW BOARD toward you.

REMOVING THE TERMINAL BOARD

- After removing the rear cover.

1. Remove the 2 screws marked **E** as shown in Fig.2.
2. After removing the claw marked **F** in the direction of arrow mark as shown in Fig.1.
3. When you pull out the TERMINAL BOARD in the direction of arrow marked **G** as shown in Fig.1, it can be removed.
   At that time, the connector of the ANTENNA SPLITTER and the TUNER comes out.
4. Thus the connector should be securely inserted when the TERMINAL BOARD is installed again.

CHECKING THE MAIN PW BOARD

1. To check the back side of the MAIN PW Board.
   1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
   2) Erect the chassis vertically so that you can easily check the back side of the MAIN PW Board.

[CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PWB.
- Before turning on power, make sure that the wire connector, CRT earth wire and other connectors properly connected.

WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together.
   Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

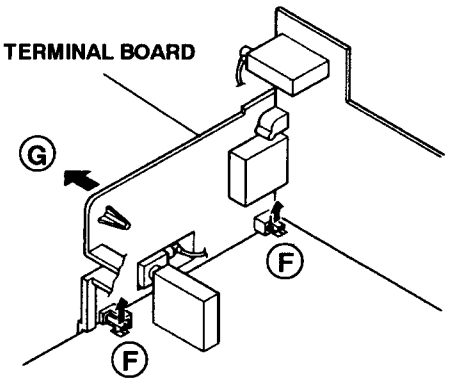
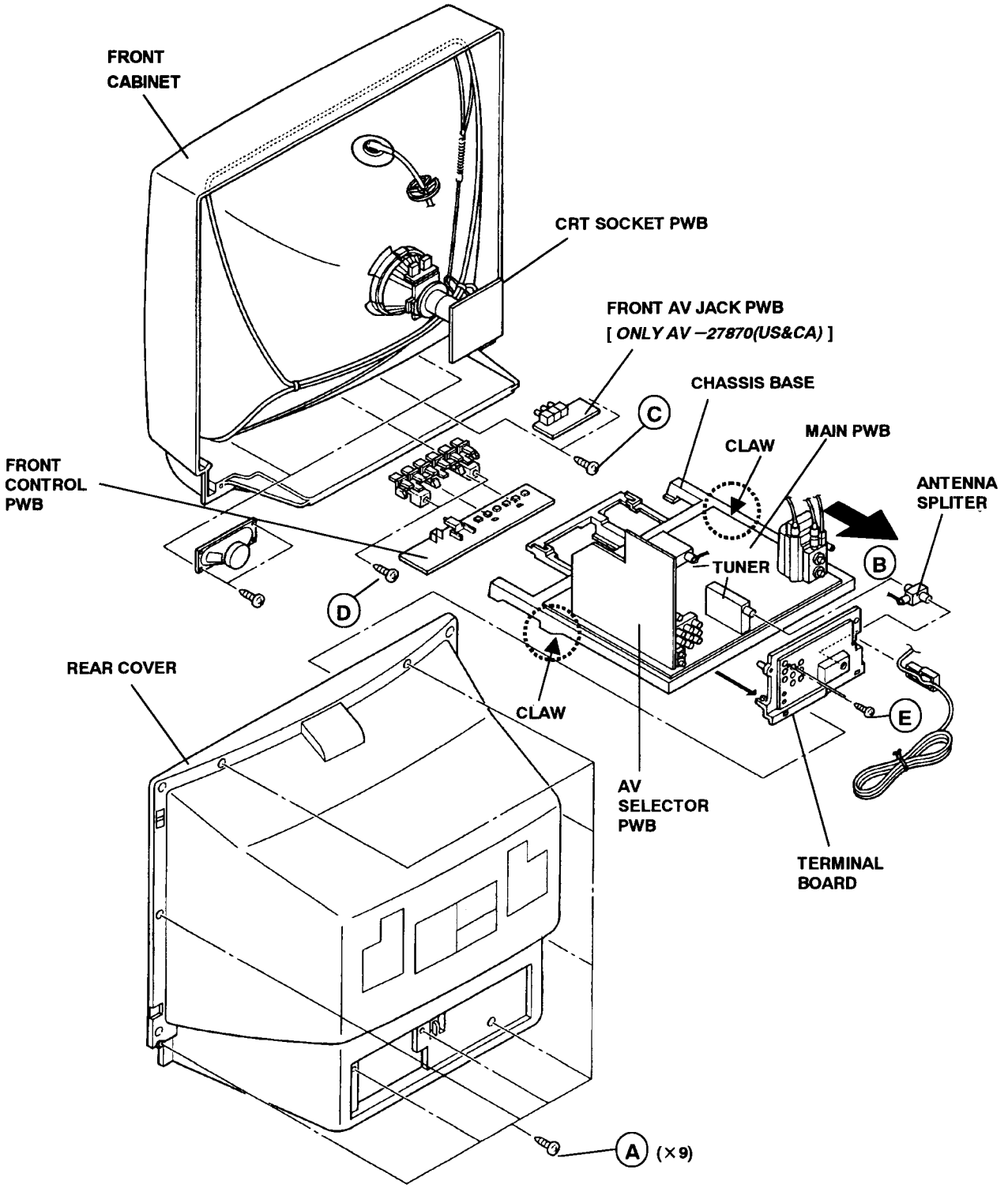


Fig. 1


FRONT
CABINET
CRT SOCKET PWB
FRONT AV JACK PWB
[ONLY AV –27870(US&CA)]
CHASSIS BASE
C
CLAW
MAIN PWB
FRONT
CONTROL
PWB
ANTENNA
SPLITER
TUNER
B
D
REAR COVER
CLAW
E
AV
SELECTOR
PWB
TERMINAL
BOARD
A (×9)

MEMORY IC REPLACEMENT

1. Memory IC

This model use a memory (EEP-ROM) IC.
The memory IC stores data for proper operation of video and deflection circuits.
When replacing, be sure to use an IC containing this (initial value) data.

2. Memory IC replacement procedure

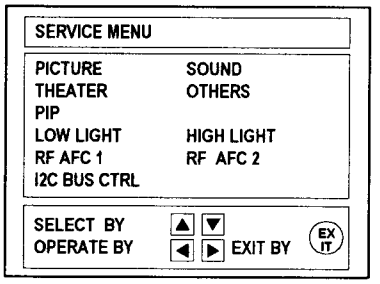
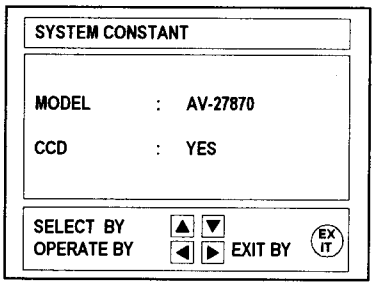
PROCEDURE	SCREEN DISPLAY
(1) **Power off** Switch off the power and disconnect the power cord from the outlet.	
(2) **Replace the memory IC.** Be sure to use memory ICs written with the initial data values.	
(3) **Power on** Connect the power cord to the outlet and switch on the power.	
(4) **System constant check and setting** 1) Simultaneously press the DISPLAY key(OSD key) and VIDEO STATUS key(STATUS key) of the remote control unit. 2) The SERVICE MENU screen of Fig.1 is displayed. 3) While the SERVICE MENU is displayed, again simultaneously press the DISPLAY and VIDEO STATUS keys(OSD and STATUS keys) to display the Fig.2 SYSTEM CONSTANT screen. 4) Refer to the SYSTEM CONSTANT table and check the setting items. Where these differ, select the setting item with the MENU UP / DOWN key and adjust the setting with the MENU LEFT / RIGHT keys. (The letters of the selected item are displayed in yellow.) 5) After adjusting, release the MENU LEFT / RIGHT key to store the setting value. 6) Press the EXIT key twice to return the normal screen. **Note :** **Remote control unit RM-C745** / **Remote control unit RM-C885** DISPLAY key / OSD key VIDEO STATUS key / STATUS key	 Fig.1  Fig.2 [The figures are about the model AV-27870]
(5) **Receive channel setting** Refer to the OPERATING INSTRUCTIONS (USER' S GUIDE) and set the receive channels (Channels Preset) as described.	
(6) **User settings** Check the user setting items according to Table 2. Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER' S GUIDE) and set the items as described.	
(7) **SERVICE MENU setting** Verify what to set in the SERVICE MENU, and set whatever is necessary. (Fig.1) refer to the SERVISE ADJUSTMENT for setting.	

TABLE 1 (System Constant setting)

Setting item	Setting constant	Setting value
MODEL	AV-27850 → AV-27870 → AV-32820 → AV-32850 → AV-32870 → AV-36850 → AV-36870 → SEARS 32V	AV-27850 : [AV-27850] AV-27870 : [AV-27870]
CCD	YES → NO	YES

TABLE 2 (User setting)

Setting item	Setting value	Setting item	Setting value
1. Use remote controller keys			
POWER	OFF	DISPLAY	OFF
CHANNEL	CH-02	VIDEO STATUS	STANDARD
VOLUME	Proper sound volume	SLEEP TIMER	00
TV/VIDEO	TV	PIP SOURCE	CH-04
CLOSED CAPTION	OFF(CC1/T1) : [AV-27850] OFF(CC1/T1/BLACK: [AV-27870]	PIP POSITION	Lower left
HYPER SURROUND	OFF		
2. Settings from MENU			
TINT	CENTER	TV SPEAKER	ON
COLOR	CENTER	AUDIO OUT	FIX
PICTURE	CENTER	LANGUAGE	ENG
BRIGHT	CENTER	CLOSED CAPTION	CAPTION : CC1 TEXT : T1 BACKGROUND : BLACK : [AV-27870]
DETAIL	CENTER		
NOTCH	OFF		
NOISE MUTE	ON		
SET VIDEO STATUS	ALL CENTER	AUTO TUNER SET UP	Unnecessary to set
BASS	CENTER	CHANNEL SUMMARY	Set optionally
TREBLE	CENTER		
BALANCE	CENTER		
MTS	STEREO	TUNER MODE	AIR
SET CLOCK	MANUAL MODE		
ON/OFF TIMER	NO		
SET LOCK CODE	Unnecessary to set		

SERVICE ADJUSTMENTS

ADJUSTMENT PREPARATION:

1. **You can make the necessary adjustments for this unit with either the remote control unit or with the adjustment equipment and parts as before.**
2. **Adjustment with the remote control unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.**
3. Turn on the power for the set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
4. Make sure that AC power is turned on correctly.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. Never touch any adjustment parts which are not specified in the list for this adjustment-variable resistors, transformers, condensers, etc.
7. Presetting before adjustment.
   Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit.

VIDEO STATUS	STANDARD
NOTCH	OFF
HYPER SURROUND	OFF
BASS, TREBLE, BALANCE	CENTER

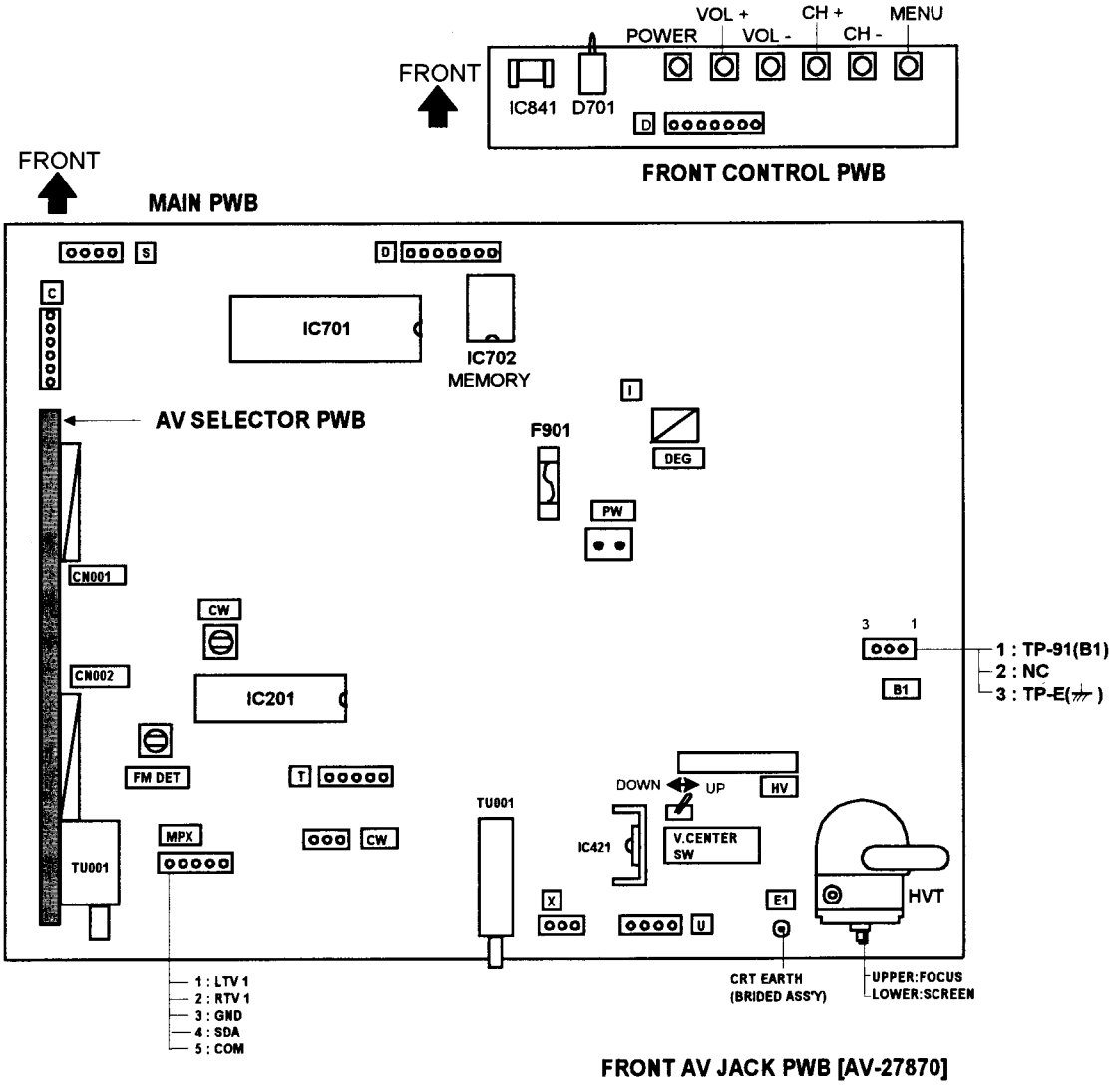
ADJUSTMENT EQUIPMENT

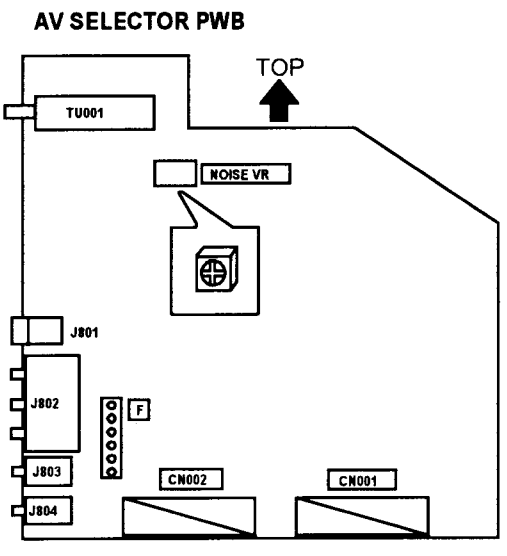
1. DC voltmeter(or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [NTSC]
4. Remote control unit
5. TV audio multiplex signal generator
6. Frequency counter

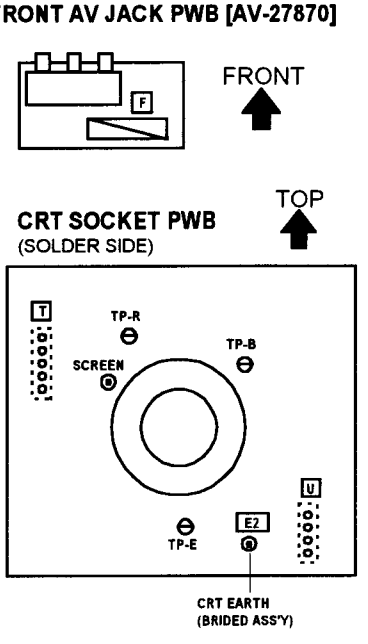
ADJUSTMENT ITEMS

- ●B1 Voltage check
- ●IF VCO adjustment
- ●RF AGC adjustment
- ●FOCUS adjustment
- ●DEFLECTION adjustment
  - V. CENTER, V. SIZE, V. POSITION adjustment
  - H. POSITION adjustment
- ●VIDEO / CHROMA adjustment
  - WHITE BALANCE (Low light) adjustment
  - WHITE BALANCE (High light) adjustment
  - SUB BRIGHT adjustment
  - SUB CONTRAST adjustment
  - SUB COLOR adjustment
  - SUB TINT adjustment
- ●PIP circuit adjustment
  - RF AGC (Noise) adjustment
  - DISPLAY POSITION adjustment
  - SUB BRIGHT adjustment
  - SUB CONTRAST adjustment
  - SUB COLOR adjustment
  - SUB TINT adjustment
- ●MTS circuit adjustment
  - INPUT LEVEL adjustment
  - STEREO VCO adjustment
  - SAP VCO adjustment
  - FILTER check
  - SEPARATION adjustment

ADJUSTMENT LOCATONS







BASIC OPERATION OF SERVICE MENU

1. Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

2. In general, 10 basic setting(adjustments) items or verifications are performed in the SERVICE MENU.

(1) PICTURE ····· This sets the setting values (adjustment values) of the VIDEO/CHROMA and DEFLECTION circuits.
(2) SOUND ····· This sets the setting values (adjustment values) of the AUDIO circuit.
(3) THEATER ····· This is used when the THEATER MODE is adjusted.
(4) OTHERS ····· This is used when the OTHERS MODE is adjusted.
(5) PIP ····· This sets the setting values (adjustment values) of the PICTURE-IN-PICTURE circuit.
(PIP is means as Picture In Picture)
(6) LOW LIGHT ····· This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
(7) HIGH LIGHT ····· This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
(8) RF AFC 1 ····· This is used when the IF VCO is adjusted.
(9) RF AFC 2 ····· This is used when the IF VCO is adjusted of the PIP. **[Do not adjust about this item]**
(10) I^2C BUS CTRL ····· This is used when ON/OFF of the I^2C BUS CTRL is set **[Do not adjust about this item]**.

3. Basic Operations of the SERVICE MENU

(1) How to enter the SERVICE MENU.

Press the DISPLAY key(OSD key) and VIDEO STATUS key(STATUS key) of the remote control unit at the same time to enter the SERVICE MENU screen ①shown in figure page later.

(2) SERVICE MENU screen selection

Press the UP / DOWN key of the MENU to select any of the following items.
(The letters of the selected items are displayed in yellow.)

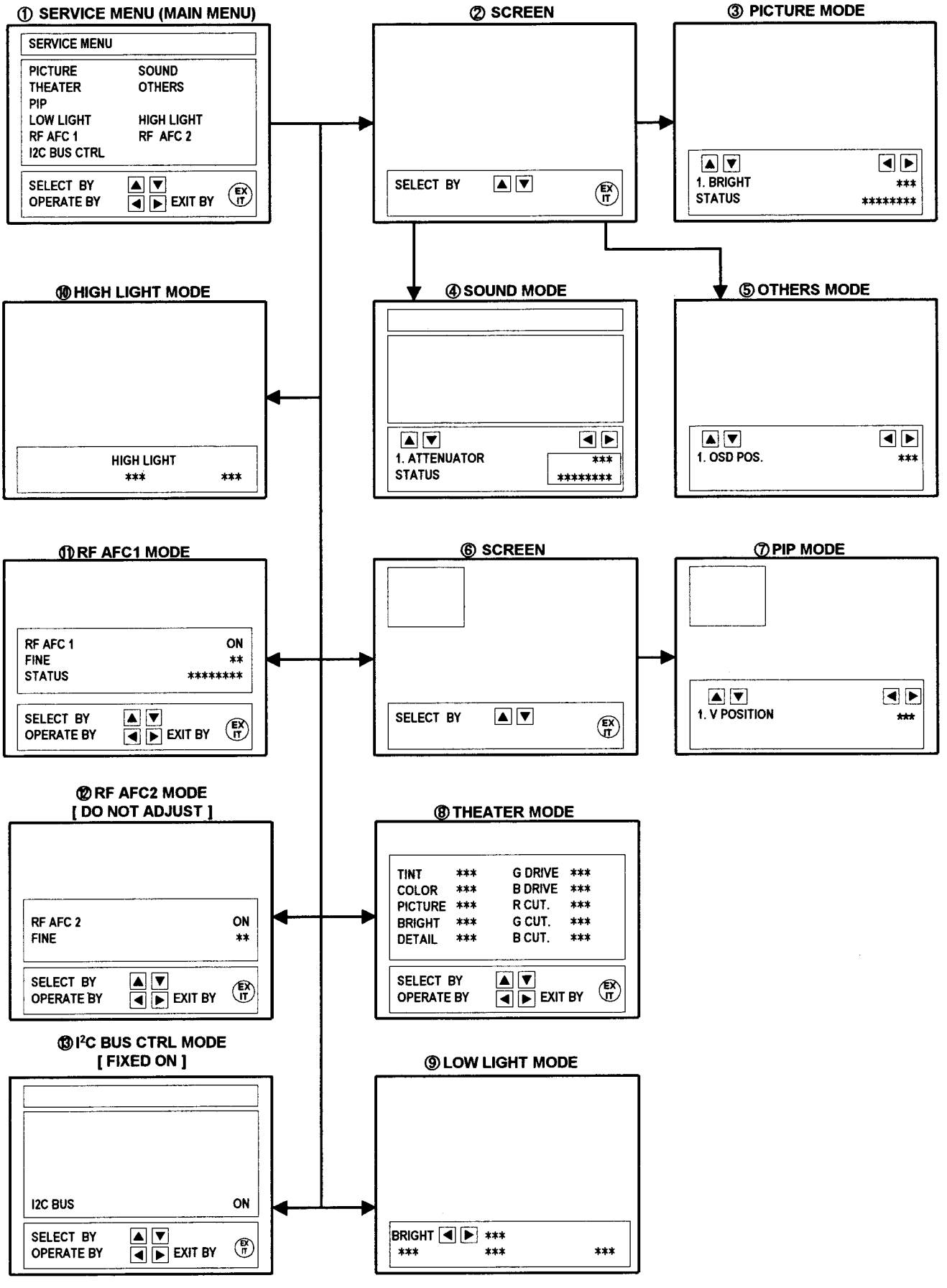
- PICTURE
- SOUND
- THEATER
- OTHERS
- PIP
- LOW LIGHT
- HIGH LIGHT
- RF AFC 1
- RF AFC 2
- I^2C BUS CTRL

(3) Enter the any setting (adjustment) mode

- **PICTURE, SOUND and OTHERS mode**
  1) If select any of PICTURE, SOUND or OTHERS items, and the LEFT / RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screen ②will be displayed as shown in figure page later.
  2) Then the UP / DOWN key is pressed, the PICTURE mode screen ③ or the SOUND mode screen ④ or the OTHERS mode screen ⑤is displayed, and the PICTURE, SOUND or OTHERS setting can be performed.

- **PIP mode**
  1) If select the PIP item, and the LEFT / RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screen ⑥ will be displayed as shown in figure page later.
  2) Then UP / DOWN key is pressed, the PIP mode screen ⑦ is displayed, and the PIP setting can be performed.

- **THEATER, LOW LIGHT, HIGH LIGHT, RF AFC1, RF AFC2 and I^2C BUS CTRL mode**
  1) If select any of THEATER / LOW LIGHT / HIGH LIGHT / RF AFC 1 / RF AFC 2 / I2C BUS CTRL items, and the LEFT / RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screens ⑧⑨⑩⑪⑫⑬ will be displayed as shown in figure page later.
  2) Then the settings or verifications can be performed.

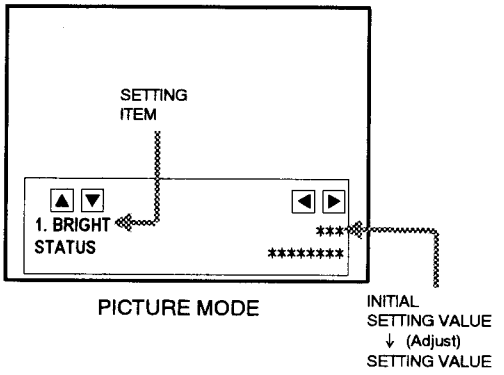

① SERVICE MENU (MAIN MENU)
SERVICE MENU
PICTURE
SOUND
THEATER
OTHERS
PIP
LOW LIGHT
HIGH LIGHT
RF AFC 1
RF AFC 2
I2C BUS CTRL
SELECT BY
OPERATE BY
EXIT BY
② SCREEN
SELECT BY
③ PICTURE MODE
1. BRIGHT
STATUS
④ SOUND MODE
1. ATTENUATOR
STATUS
⑤ OTHERS MODE
1. OSD POS.
⑥ SCREEN
SELECT BY
⑦ PIP MODE
1. V POSITION
⑧ THEATER MODE
TINT
COLOR
PICTURE
BRIGHT
DETAIL
G DRIVE
B DRIVE
R CUT.
G CUT.
B CUT.
⑨ LOW LIGHT MODE
BRIGHT
⑩ HIGH LIGHT MODE
HIGH LIGHT
⑪ RF AFC1 MODE
RF AFC 1
FINE
STATUS
⑫ RF AFC2 MODE
[DO NOT ADJUST]
RF AFC 2
FINE
⑬ I²C BUS CTRL MODE
[FIXED ON]
I2C BUS
ON

(3) Setting method

1) UP / DOWN key of the MENU
Select the SETTING ITEM.

2) LEFT / RIGHT key of the MENU
Setting(adjust) the SETTING VALUE of the SETTING ITEM.
When the key is released the SETTING VALUE will be stored (memorized).

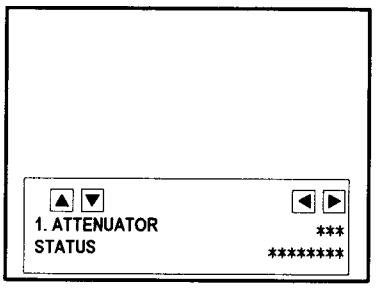
3) EXIT key
Returns to the previous screen.



PICTURE MODE

(4) Releasing SERVICE MENU

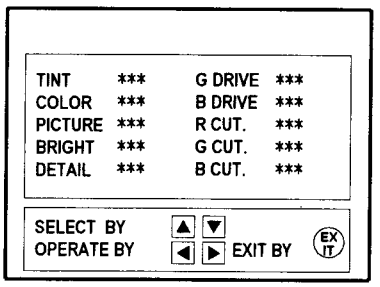
1) After returning to the SERVICE MENU upon completion of the setting (adjustment) work, press the EXIT key again.



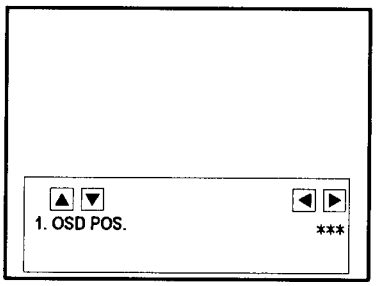
SOUND MODE

★ The settings for LOW LIGHT and HIGH LIGHT are described in the WHITE BALANCE page of ADJUSTMENT.

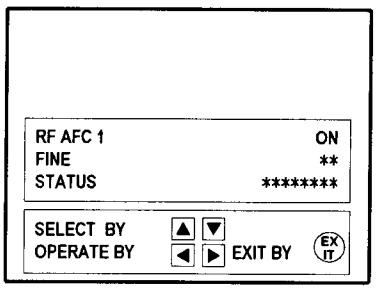
★ The setting for RF AFC 1 are described in the IF VCO page of ADJUSTMENT.



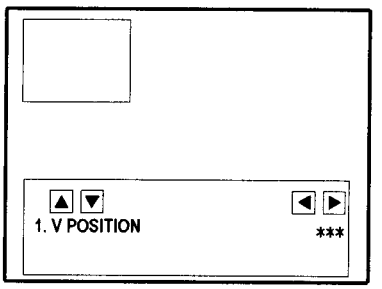
THEATER MODE



OTHERS MODE



RF AFC 1 MODE



PIP MODE

INITIAL SETTING VALUE OF SERVICE MENU

1. **Adjustment of the SERVICE MENU is made on the basis of the initial setting values ; however, the new setting values which set the screen in its optimum condition may differ from the initial setting.**
2. **Do not change the initial Setting Values of the Setting (Adjustment) items not listed In "ADJUSTMENT".**

- PICTURE MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	BRIGHT	0~127	64
2.	PICTURE	0~127	75
3.	WPS (WHITE PEAK SUPPRESSOR)	0 / 1	1
4.	TV DETAIL	0~63	38
5.	TV BPF (TV B.P.FILTER)	0 / 1	1
6.	TINT	0~127	64
7.	COLOR	0~127	52
8.	EXT BRIGHT	±25	-1
9.	EXT PICT.	±25	0
10.	EXT DETAIL	0~63	38
11.	EXT BPF (EXT B.P.FILTER)	0 / 1	1
12.	EXT TINT	±25	+8
13.	EXT COLOR	±25	+3
14.	V SIZE	0~63	30
15.	V CENTER	0~7	0
16.	H POSITION	0~31	22
17.	H AFC	0 / 1	0
18.	BLANKING	0 / 1	0
19.	RF AGC	0~63	35
20.	PIF VCO	0~127	64

- SOUND MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	ATTENUATOR	0~63	50
2.	BALANCE	0~63	32
3.	NOISE DET.	0 / 1	1
4.	IN LEVEL (INPUT LEVEL)	0~63	25
5.	FH MONITOR	0 / 1	0
6.	STEREO VCO	0~63	23
7.	PILOT CAN. (PILOT CANCELER)	0 / 1	0
8.	FILTER	0~63	30
9.	LOW SEP. (LOW SEPARATION)	0~63	35
10.	HI SEP. (HI SEPARATION)	0~63	17
11.	5FH MON. (5FH MONITOR)	0 / 1	0
12.	SAP VCO	0~63	28
13.	IN GAIN (INPUT GAIN)	0 / 1	0
14.	FIL.OFFSET	0~10	0

- THEATER MODE

Setting (Adjustment) item	Variable range	Initial setting value
TINT	±20	±00
COLOR	±20	-2
PICTURE	±20	-15
BRIGHT	±20	±00
DETAIL	±15	-3
G DRIVE	-80~+50	-25
B DRIVE	-80~+50	-72
R CUT. (R CUTOFF)	±10	±00
G CUT (G CUTOFF)	±10	±00
B CUT (B CUTOFF)	±10	±00

● OTHERS MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value	
			AV-27850	AV-27870
1.	OSD POS.	0 ~ 7	0	
2.	CCD POS. (CLOSED CAPTION DECODER POS.)	0 ~ 15	5	
3.	EOSEL	0 / 1	1	
4.	F1-FIELD	0 / 1	1	
5.	F1-LINE21	0 ~ 15	8	
6.	F2-LINE21	0 ~ 15	8	
7.	OSD STABI	0 / 1	0	
8.	LOCK DET.	0 / 1	0	
9.	COL.NOISE	0 / 1	0	
10.	MENU COLOR	-30 ~ 0	-10	
11.	MENU PICT	-30 ~ 0	-12	
12.	MENU BRI	-30 ~ 0	-12	

● PIP MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	V POSITION	0 ~ 127	25
2.	LOWER POS.	0 ~ 255	123
3.	H POSITION	0 ~ 63	9
4.	RIGHT POS.	0 ~ 127	93
5.	TINT	0 ~ 63	45
6.	COLOR SAT	0 ~ 127	50
7.	CONTRAST	0 ~ 127	50
8.	BRIGHT	0 ~ 31	20
9.	FRAME Y	0 ~ 15	8
10.	FRAME BY	0 ~ 7	4
11.	FRAME RY	0 ~ 7	4
12.	H AREA	0 ~ 63	23
13.	V AREA	0 ~ 63	41
14.	Y/C DELAY	0 ~ 15	4
15.	EXT MH SEL	0 ~ 3	0
16.	EXT MV SEL	0 ~ 3	0
17.	EXT SYNC SEL	0 ~ 3	3
18.	HP	0 ~ 3	0
19.	AD CLOCKSEL	0 ~ 3	0
20.	KILLER	0 ~ 1	1
21.	TEST-ACC-L	0 / 1	0
22.	ACC-LEVEL	0 ~ 63	21
23.	AFCOFF	0 / 1	0
24.	ADJ	0 ~ 15	5
25.	ASPECT H	0 ~ 63	54
26.	HT	0 ~ 15	7
27.	ASPECT V	0 ~ 255	67
28.	TEST-PIP-C	0 / 1	0
29.	BGPMSEL	0 / 1	0
30.	BPFSEL	0 ~ 3	0
31.	LPFSEL	0 ~ 3	2
32.	MODE	0 ~ 3	1
33.	BG-START	0 ~ 63	14
34.	DOUTSEL	0 ~ 3	0
35.	EXT BH SEL	0 ~ 3	3
36.	SEL-PD-OUT	0 ~ 1	0

- LOW LIGHT MODE

Setting (Adjustment) item	Variable range	Initial setting value
R CUTOFF	0 ~ 255	20
G CUTOFF	0 ~ 255	20
B CUTOFF	0 ~ 255	20

- HIGH LIGHT MODE

Setting (Adjustment) item	Variable range	Initial setting value
G DRIVE	0 ~ 255	128
B DRIVE	0 ~ 255	128

- RF AFC 1 MODE

Setting (Adjustment) item	Variable range	Initial setting value
RF AFC 1	ON / OFF	ON
FINE	-77 ~ +77	±00

- RF AFC 2 MODE

Setting (Adjustment) item	Variable range	Initial setting value
RF AFC 2	ON/OFF	ON
FINE	-77 ~ +77	XX [Do not adiust]

- I²C BUS CTRL MODE

Setting (Adjustment) item	Variable range	Initial setting value
I²C BUS	ON/OFF	Fixed ON

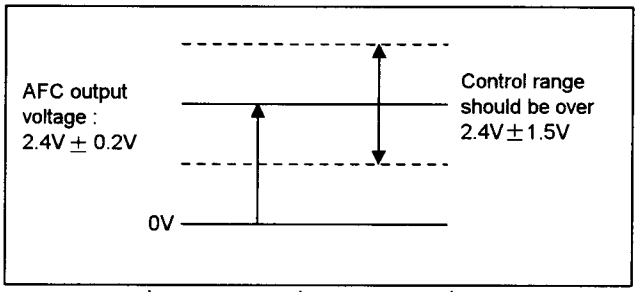
■ ADJUSTMENTS

B1 VOLTAGE CHECK

Item	Measuring instrument	Test point	Adjustment item	Description
B1 Voltage check	**DC Voltmeter**	**B1 (B1 Connector 1 pin) (TP-91)** **TP-E(⏚) (B1 Connector 3 pin)**		1. Input a black and white signal (color off). 2. Connect the DC voltmeter to B1 connector 1 pin (TP-91) and TP-E(⏚) (B1 connector 3 pin). 3. Confirm that the voltage is DC134V±2V.

ADJUSTMENT OF IF VCO

Item	Measuring instrument	Test point	Adjustment item	Description
IF VCO adjustment	**Oscilloscope** **Signal generator**	**CW Connector 3 pin**	**CW TRANSF.** **[RF AFC 1] mode**	1. Input the color bar signal. 2. Connect the oscilloscope to pin 3 of the CW connector. 3. Select the [RF AFC 1] mode of the SERVICE MENU, and set the RF AFC1 to OFF and FINE to ±00. 4. Turn CW TRANSF., verify that the AFC output voltage changes quickly between 2.4V ±1.5V and then adjust the voltage to 2.4V ±0.2V. 5. Return the RF AFC to ON. 6. Cancel the SERVICE MENU and check that no irregularities are displayed on the screen. If there any irregularities, select [RF AFC 1] mode on the SERVICE MENU and verify that FINE is 00 when the AFC is ON. Repeat steps 3 to 5 if necessary.



ADJUSTMENT OF RF AGC

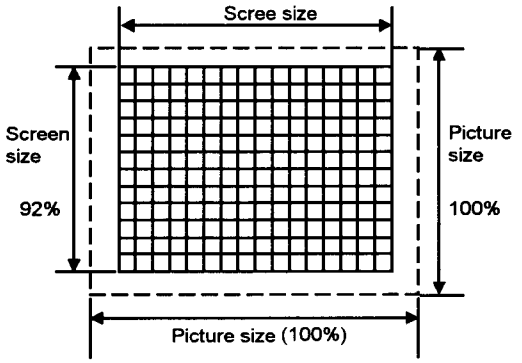
RF AGC adjustment			**No.19 RF AGC**	1. Receive a broadcast. 2. Select "No.19 RF AGC" of the PICTURE mode in SERVICE MENU. 3. Press the MUTE key and turn off color. 4. With the MENU LEFT key, get noise in the screen picture. (0 side of setting value) 5. Press the MENU RIGHT key and stop when noise disappears from the screen. 6. Change to other channels and make sure that there is no irregularity. 7. Press the MUTE key and get color out.

ADJUSTMENT OF FOCUS

FOCUS adjustment	**Signal generator**		**FOCUS VR [In HVT]**	1. Input a crosshatch signal. 2. While looking at the screen, adjust FOCUS VR so that the vertical and horizontal lines will be clear and in fine detail. 3. Make sure that the picture is in focus even when the screen gets darkened.

ADJUSTMENT OF DEFLECTION CIRCUIT

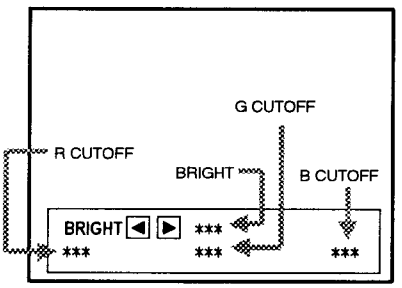
Item	Measuring instrument	Test point	Adjustment item	Description
V.CENTER V.SIZE and V.POSITION adjustment	**Signal generator**		**No.14 V SIZE** **No.15 V CENTER** **V.CENTER SW**	1. Input a crosshatch signal. 2. Confirm the "No.15 V CENTER" of the PICTURE mode is 0. 3. Adjust the vertical SCREEN size to 92% with the "No.14 V SIZE" and V.CENTER SW.
H.POSITION adjustment	**Signal generator**		**No.16 H POSITION**	1. Input a crosshatch signal. 2. Select the "No.16 H POSITION" of the PICTURE mode in SERVICE MENU. 3. Confirm the initial setting value of the "No.16 H POSITION". 4. Adjust the "No.16 H POSITION" until the screen will be horizontally centered.

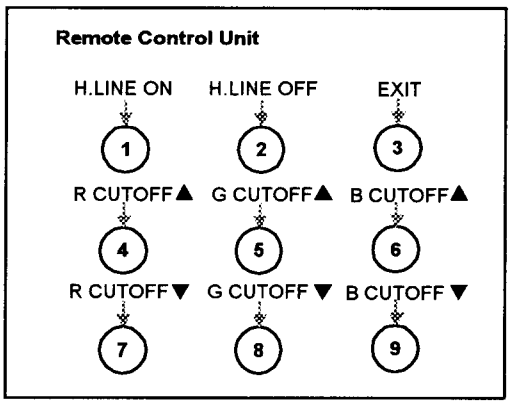


ADJUSTMENT OF VIDEO / CHROMA CIRCUIT

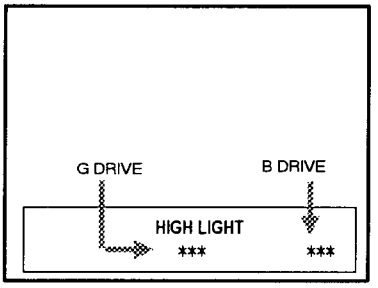
Item	Measuring instrument	Test point	Adjustment item	Description
WHITE BALANCE (Low Light) adjustment	**Signal generator Remote control unit**		**BRIGHT R CUTOFF G CUTOFF B CUTOFF SCREEN VR**	1. Input a black and white signal (color off). 2. Select the LOW LIGHT mode from the SERVICE MENU. 3. Confirm the Initial setting value of "BRIGHT", "R CUTOFF", "G CUTOFF" and "B CUTOFF". 4. Display one horizontal line by pressing the ①key of the remote control unit. 5. Turn the screen VR all the way to the left. 6. Turn the screen VR gradually to the right from the left until either one of the red, blue or green colors appears slightly. 7. Adjust the two colors which did not appear until the one horizontal line that is displayed becomes white using the ④to⑨keys of the remote control unit. 8. Turn the screen VR until the first horizontal line is displayed slightly. 9. Press the②key to return to the regular screen.
WHITE BALANCE (High Light) adjustment	**Signal generator Remote control unit**		**G DRIVE B DRIVE**	1. Input a black and white signal (color off). 2. Select the HIGH LIGHT mode in the SERVICE MENU. 3. Confirm the initial setting value of "G DRIVE" and "B DRIVE". 4. Adjust the screen color to white with the⑤,⑥,⑧and⑨keys of the remote control unit.

[LOW LIGHT] MODE





[HIGH LIGHT] MODE



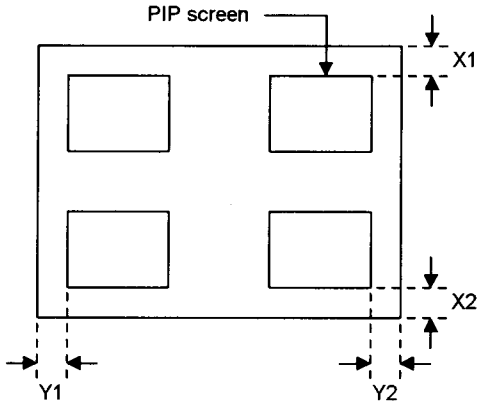
Remote Control Unit

①key : H.LINE ON
②key : H.LINE OFF
③key : EXIT
⑤key : G DRIVE ▲
⑥key : B DRIVE ▲
⑧key : G DRIVE ▼
⑨key : B DRIVE ▼

Item	Measuring instrument	Test point	Adjustment item	Description
SUB BRIGHT adjustment	**Remote control unit**		**No.1 BRIGHT**	1. Receive a broadcast. 2. Select "No.1 BRIGHT" of the PICTURE mode in SERVICE MENU. 3. Confirm the initial setting value of the "No.1 BRIGHT" . 4. If the brightness is not the best with the initial setting value, make fine adjustment of the "No.1 BRIGHT" until you get the optimum brightness.
SUB CONTRAST adjustment	**Remote control unit**		**No.2 PICTURE**	1. Receive a broadcast. 2. Select "No.2 PICTURE" of the PICTURE mode in SERVICE MENU. 3. Confirm the initial setting value of the "No.2 PICTURE". 4. If the contrast is not the best with the initial setting value, make fine adjustment of the "No.2 PICTURE" until you get the optimum contrast.
SUB COLOR adjustment	**Remote control unit**		**No.7 COLOR**	1. Receive a broadcast. 2. Select "No.7 COLOR" of the PICTURE mode in SERVICE MENU. 3. Confirm the initial setting value of the "No.7 COLOR". 4. If the color is not the best with the initial setting value, make fine adjustment until you get the best color.
SUB TINT adjustment	**Remote control unit**		**No. 6 TINT**	1. Input a color bar signal (full field color bar 75% white). 2. Select "No. 6 TINT" of the PICTURE mode in SERVECE MENU. 3. Confirm the initial setting value of the "No. 6 TINT". 4. If the tint is not the best with the initial setting value, make fine adjustment until you get the best tint.

ADJUSTMENT OF PIP CIRCUIT

Item	Measuring instrument	Test point	Adjustment item	Description
RF AGC (NOISE) adjustment			**NOISE VR [AV SELECTOR PWB]**	1. Receive a broadcast to PIP child screen. 2. Turn the NOISE VR so that noise appear in the picture in PIP screen. 3. Then adjust the NOISE VR in the direction where noise disappears from the picture, are stop it where noise has disappeared from the picture. 4. Select another channel, and make sure that there occurs no trouble.
PIP DISPLAY POSITION adjustment	**Signal generator**		**No.1 V POSITION** **No.2 LOWER POS.** **No.3 H POSITION** **No.4 RIGHT POS.**	1. Input a black and white signal (color off) to both main and pip screen. 2. Select "No.1 V POSITION" of the PIP mode in SERVICE MENU. 3. Confirm the initial setting value of the "No.1 V POSITION". 4. Adjust the "No.1 V POSITION" so that the position of the PIP screen edge of upper will be at X1 as shown. 5. Adjust the corresponding modes of "No.2, No.3, No.4" with the same steps as 2 ~ 4 above.



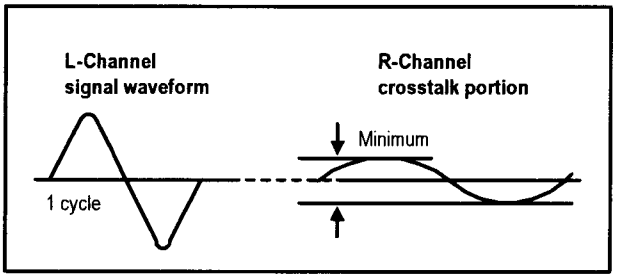
PIP SERVICE MODE No.	Item	PIP SETING POSITION Approx. (mm)
No.1	UPPER POSITION (X1)	30
No.2	LOWER POSITION (X2)	30
No.3	H POSITION (Y1)	40
No.4	RIGHT POSITION (Y2)	40

Item	Measuring instrument	Test point	Adjustment item	Description
PIP SUB BRIGHT adjustment			**No. 8 BRIGHT**	1. Receive a broadcast to both main and pip child screen. 2. Select "No.8 BRIGHT" of the PIP mode in the SERVICE MENU. 3. Confirm the initial setting value of the "No.8 BRIGHT". 4. If the brightness of the pip child screen is not the best with initial setting value, and too difficult during main screen brightness, make fine adjustment of the "No.8 BRIGHT" until getting the optimum brightness.
PIP SUB CONTRAST adjustment			**No.7 CONTRAST**	1. Receive a broadcast to both main and pip child screen. 2. Select "No.7 CONTRAST" of the PIP mode in the SERVICE MENU. 3. Confirm the initial setting value of the "No.7 CONTRAST". 4. If the contrast of the pip child screen is not the best with initial setting value, and too difficult during main screen contrast, make fine adjustment of the "No.7 CONTRAST" until getting the optimum contrast.
PIP SUB COLOR adjustment			**No.6 COLOR SAT**	1. Receive a broadcast to both main and pip child screen. 2. Select "No.6 COLOR SAT" of the PIP mode in the SERVICE MENU. 3. Confirm the initial setting value of the "No.6 COLOR SAT". 4. If the color of the pip child screen is not the best with initial setting value, and too difficult during main screen color, make fine adjustment of the "No.6 COLOR SAT" until getting the optimum color.
PIP SUB TINT adjustment			**No.5 TINT**	1. Receive a broadcast to both main and pip child screen. 2. Select "No.5 TINT" of the PIP mode in the SERVICE MENU. 3. Confirm the initial setting value of the "No.5 TINT". 4. If the tint of the pip child screen is not the best with the initial setting value, and too difficult during the main screen tint, make fine adjustment of the "No.5 TINT" until getting the optimum tint.

ADJUSTMENT OF MTS CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
MTS INPUT LEVEL check			**No.4 IN LEVEL**	1. Select the "No.4 IN LEVEL" of the SOUND mode in SERVICE MENU. 2. Verify that the No.4 IN LEVEL is set at its initial setting value.
MTS STEREO VCO adjustment	**Signal generator** **Frequency counter**	**MPX Connector 2 pin RTV1 [MAIN PWB]**	**No.5 FH MONITER** **No.6 STEREO VCO**	1. Receive a RF signal (non modulated sound signal) from the antenna terminal. 2. Select the "No.5 FH MONITER" of SOUND mode in SERVICE MENU, change the setting value from 0 to 1. 3. Connect the frequency connector to pin 2 of MPX connector. 4. Select the "No.6 STEREO VCO". 5. Confirm the initial setting value of the "No.6 STEREO VCO". 6. Adjust the "No.6 STEREO VCO" so that the frequency counter will display 15.73kHz±0.1kHz. 7. Select the "No.5 FH MONITER" of the SOUND mode, and reset the setting value from 1 to 0.

Item	Measuring instrument	Test point	Adjustment item	Description
MTS SAP VCO adjustment	**Signal generator** **Frequency counter**	**MPX** **Connector** **4 pin SDA** **3 pin GND** **2 pin RTV1** **[MAIN PWB]**	**No.11 5FH MON.** **No.12 SAP VCO.**	1. Receive a RF signal (non modulated sound signal) from the antenna terminal. 2. Connect between pin 4 of MPX connector and GND (pin 3 of MPX connector) through 1MΩ resistor. 3. Select the "No.11 5FH MON." of the SOUND mode in SERVICE MENU, and reset the setting value from 0 to 1. 4. Connect the frequency connector to pin 2 (R.OUT) of MPX connector. 5. Select the "No.12 SAP VCO". 6. Confirm the initial setting value of "No.12 SAP VCO". 7. Adjust the "No.12 SAP VCO" so that the frequency connector will display 78.67kHz±0.5kHz. 8. Select the "No.11 5FH MON." of the SOUND mode, and reset the setting value from 1 to 0.
MTS FILTER check			**No.8 FILTER**	1. Select the "No.8 FLTER" of the SOUND mode in SERVICE MENU. 2. Verify that the "No.8 FLTER" is set at its initial setting value.
MTS SEPARATION adjustment	**TV audio multiplex signal generator** **Oscilloscope**	**MPX** **Connector** **1 pin LTV1** **2 pin RTV1** **[MAIN PWB]**	**No.9 LOW SEP.** **No.10 HI SEP.**	1. Input a stereo L signal (300Hz) from the TV Audio multiplex signal generator to the antenna terminal. 2. Connect an oscilloscope to pin 1 (L.OUT) of MPX connector, and display one cycle portion of the 300Hz signal. 3. Change the connection of the oscilloscope to pin 2 (R.OUT) of MPX connector, and enlarge the voltage axis. 4. Select the "No.9 LOW SEP." of the SOUND mode in SERVICE MENU. 5. Confirm the initial setting value of the "No.9 LOW SEP.". 6. Adjust the "No.9 LOW SEP." so that the stroke element of the 300Hz signal will become minimum. 7. Change the signal to 3kHz, and similarly adjust the "No.10 HI SEP.".



HOW TO CHECK THE HIGH VOLTAGE HOLD DOWN CIRCUIT

1. HIGH VOLTAGE HOLD DOWN CIRCUIT

After repairing the high voltage hold down circuit shown in Fig. 1.
This circuit shall be checked to operate correctly.

2. CHECKING OF THE HIGH VOLTAGE HOLD DOWN CIRCUIT

(1) Turn the POWER SW ON.
(2) As shown in Fig.2, set the resistor (between [X] connector [1] & [3]).
(3) Make sure that the screen picture disappears.
(4) Temporarily unplug the power cord.
(5) Remove the resistor (between [X] connector [1] & [3]).
(6) Again plug the power cord, make sure that the normal picture is displayed on the screen.

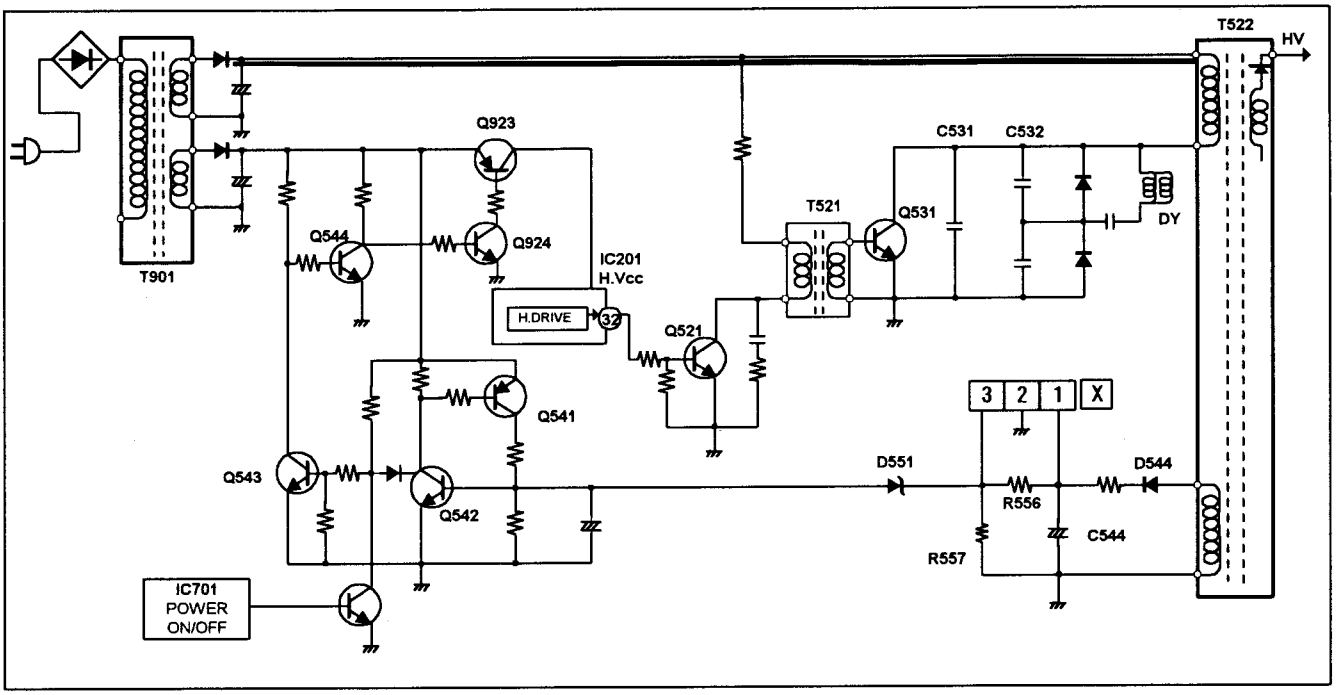


Fig. 1

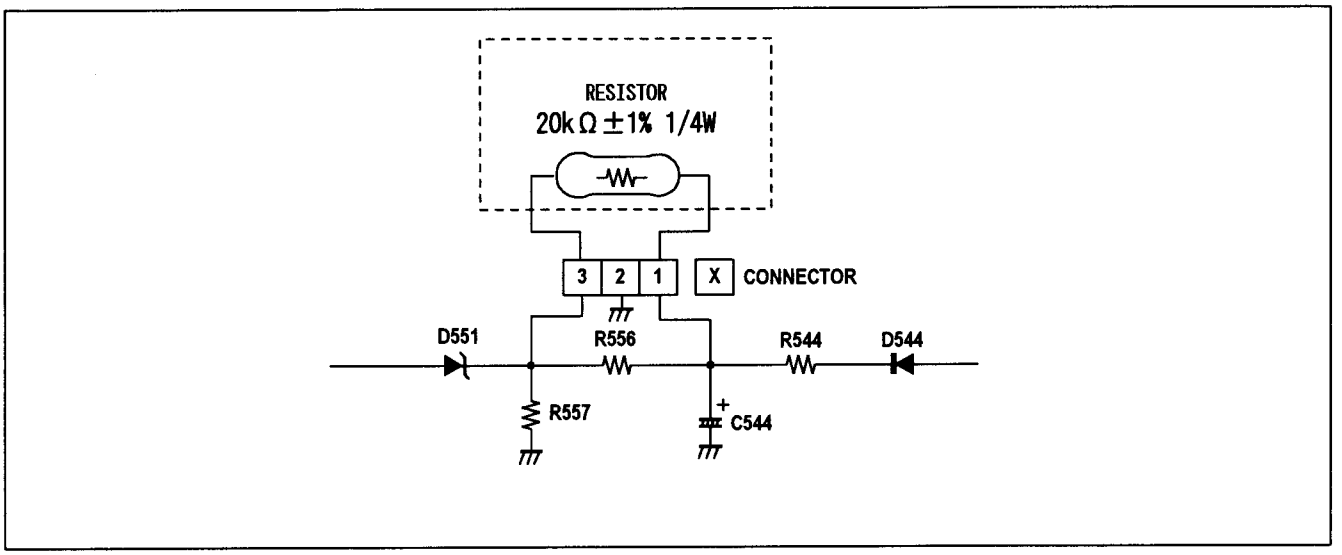


Fig.2

AV-27850(US&CA) AV-27870(US&CA) STANDARD CIRCUIT DIAGRAM

■NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the ⚠symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal :Color bar signal
(2)Setting positions of each knob/button and variable resistor :Original setting position when shipped
(3)Internal resistance of tester :DC 20kΩ/V
(4)Oscilloscope sweeping time :H ⇒20μS/div
:V ⇒5mS/div
:Others ⇒ Sweeping time is specified
(5)Voltage values :All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL[EXAMPLE]

•In the PW board :R1209→R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

•Resistance value

No unit	:[Ω]
K	:[KΩ]
M	:[MΩ]

•Rated allowable power

No indication	:1/6[W]
Others	:As specified

•Type

No indication	:Carbon resistor
OMR	:Oxide metal film resistor
MFR	:Metal film resistor
MPR	:Metal plate resistor
UNFR	:Uninflammable resistor
FR	:Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

•Capacitance value

1or higher	:[pF]
less than 1	:[μF]

•Withstand voltage

No indication	:DC50[V]
Others	:DC withstand voltage[V]
AC indicated	:AC withstand voltage[V]

* Electrolytic Capacitors
47/50[Example]:Capacitance value[μF]/withstand voltage[V]

•Type

No indication	:Ceramic capacitor
MY	:Mylar capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	:[μH]
Others	:As specified

(4)Power Supply

:B1(134V)
:B2(12V)
:9V
:5V

* Respective voltage values are indicated.

(5)Test Point

: Test point
: Only test point display

(6)Connecting method

: Connector
: Wrapping or soldering
: Receptacle

(7)Ground symbol

: LIVE side ground
: ISOLATED(NEUTRAL) side ground
: EARTH ground
: DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

(1) Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

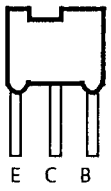
(2) Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

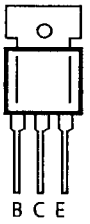
May 1997 No.51213

SEMICONDUCTOR SHAPES (* = Bottom view)

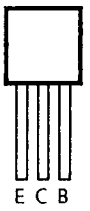
TRANSISTORS



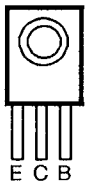
2SC4502-T
2SC5083(L-P)



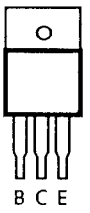
2SC2068-LB
2SC4256
2SD1133(CD)



2SA933(QR) 2SC3311A(QR)
2SA933S(QR) DTC114YS
2SA1309A(QR) DTC124ES
2SC1740(QR) DTC323TS
2SC1740S(QR) 2SA1585S(R)-T
2SC2785(JH)



2SC4212
2SC4212-C1



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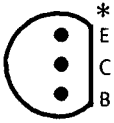
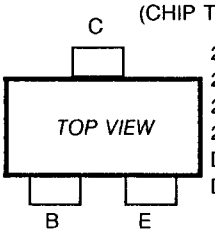
2SD1555
2SD1554-C1
2SD1876-YD
2SD1878-YD
2SD2499-LB



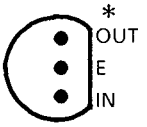
2SA1015(YG)
2SA673(C)
2SA949(Y)
2SA966(OY)
2SB774(RS)
2SC1815(YG)
2SC2655(Y)-T

(CHIP TR)



2SA1037K(QR)-X
2SA1162(YG)-X
2SC2712(YG)-X
2SC2412K(QR)-X
DTC124EKA-X
DTA124EKA-X

ICs



AL78L09
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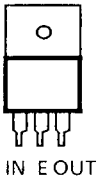
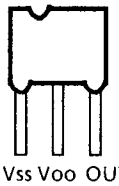
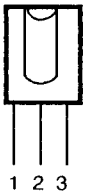
AN78L12
RC78L05A-Y
TA78L005AP
TA78L012AP
KIA78L05BP-Y



TA78005AP KIA7809AI
TA78012AP KIA7805PI
AN7805 KIA7809PI
UPC2412HF XRA17809T
UPC2405HF BA17809T
UPC2409AHF



MN1280-K
MN1280-Q



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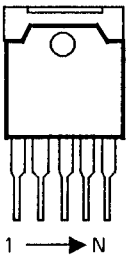

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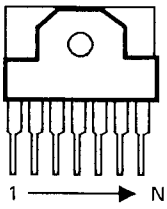
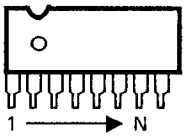
STR-F6515



LA7830
LA7832
LA4485



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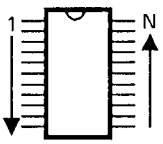

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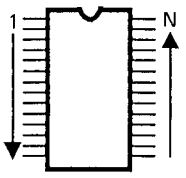
TC4066BP
TEA5114A
VUC2003
UPD6326C
LA7583
AN5860



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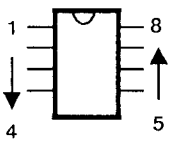

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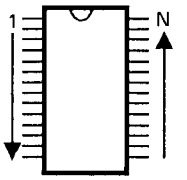
AT24C02-32850



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CXA1545AS
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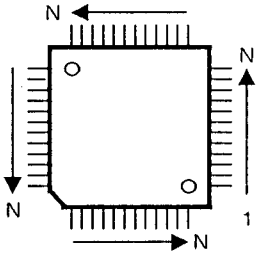
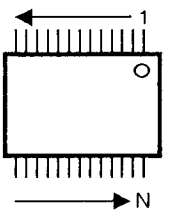
LA7403
LC864164B-5C01

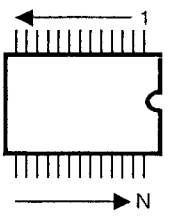
CHIP ICs



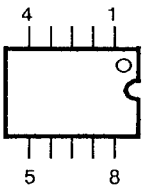
LC74401E
GS101



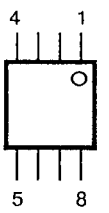
LC7480M-W
TA8779F-X
LC74411



T518128CFL10V
TC74HC4066AF-X
TC74HC573AF-X



BA7655AF-X



UPC311G2-X

■ CHANNEL CHART(US)

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP.	
○	○	VL	02 03 04 05 06		I
		VH	07 08 09 10 11 12 13		II
×	○	MID	A	14	I
			B	15	
			C	16	II
			D	17	
			E	18	
			F	19	
			G	20	
			H	21	
			I	22	
		SUPER	J	23	
			K	24	
			L	25	
			M	26	
			N	27	
			O	28	
			P	29	
			Q	30	
			R	31	
			S	32	
			T	33	
			U	34	
			V	35	
			W	36	
		HYPER	W + 1	37	
			W + 2	38	
			W + 3	39	
			W + 4	40	
			W + 5	41	
			W + 6	42	
			W + 7	43	
			W + 8	44	
			W + 9	45	
			W + 10	46	
			W + 11	47	
			W + 12	48	IV
			W + 13	49	
			W + 14	50	
			W + 15	51	
			W + 16	52	
			W + 17	53	
			W + 18	54	
			W + 19	55	
			W + 20	56	
			W + 21	57	
			W + 22	58	
			W + 23	59	
			W + 24	60	
			W + 25	61	
			W + 26	62	
			W + 27	63	
			W + 28	64	
		ULTRA	W + 29	65	
			W + 30	66	
			W + 31	67	
			W + 32	68	
			W + 33	69	
			W + 34	70	

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP.	
×	○	ULTRA	W + 35	71	IV
			W + 36	72	
			W + 37	73	
			W + 38	74	
			W + 39	75	
			W + 40	76	
			W + 41	77	
			W + 42	78	
			W + 43	79	
			W + 44	80	
			W + 45	81	
			W + 46	82	
			W + 47	83	
			W + 48	84	
			W + 49	85	
			W + 50	86	
			W + 51	87	
			W + 52	88	
			W + 53	89	
			W + 54	90	
			W + 55	91	
			W + 56	92	
			W + 57	93	
			W + 58	94	
			W + 59	100	
			W + 60	101	
			W + 61	102	
			W + 62	103	
			W + 63	104	
			W + 64	105	
			W + 65	106	
			W + 66	107	
			W + 67	108	
			W + 68	109	
			W + 69	110	
			W + 70	111	
			W + 71	112	
			W + 72	113	
			W + 73	114	
			W + 74	115	
			W + 75	116	
			W + 76	117	
			W + 77	118	
			W + 78	119	
			W + 79	120	
			W + 80	121	
			W + 81	122	
			W + 82	123	
			W + 83	124	
			W + 84	125	
		SUB MID	A-8	01	I
			A-4	96	
			A-3	97	
			A-2	98	
			A-1	99	
○	×	UHF	14 ∫ 69		IV

TOTAL 180CH
{ VHF 124CH
{ UHF 56CH

NOTE:
TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES.
SPECIAL ADAPTERS MAY BE REQUIRED.

CHANNEL CHART(CA)

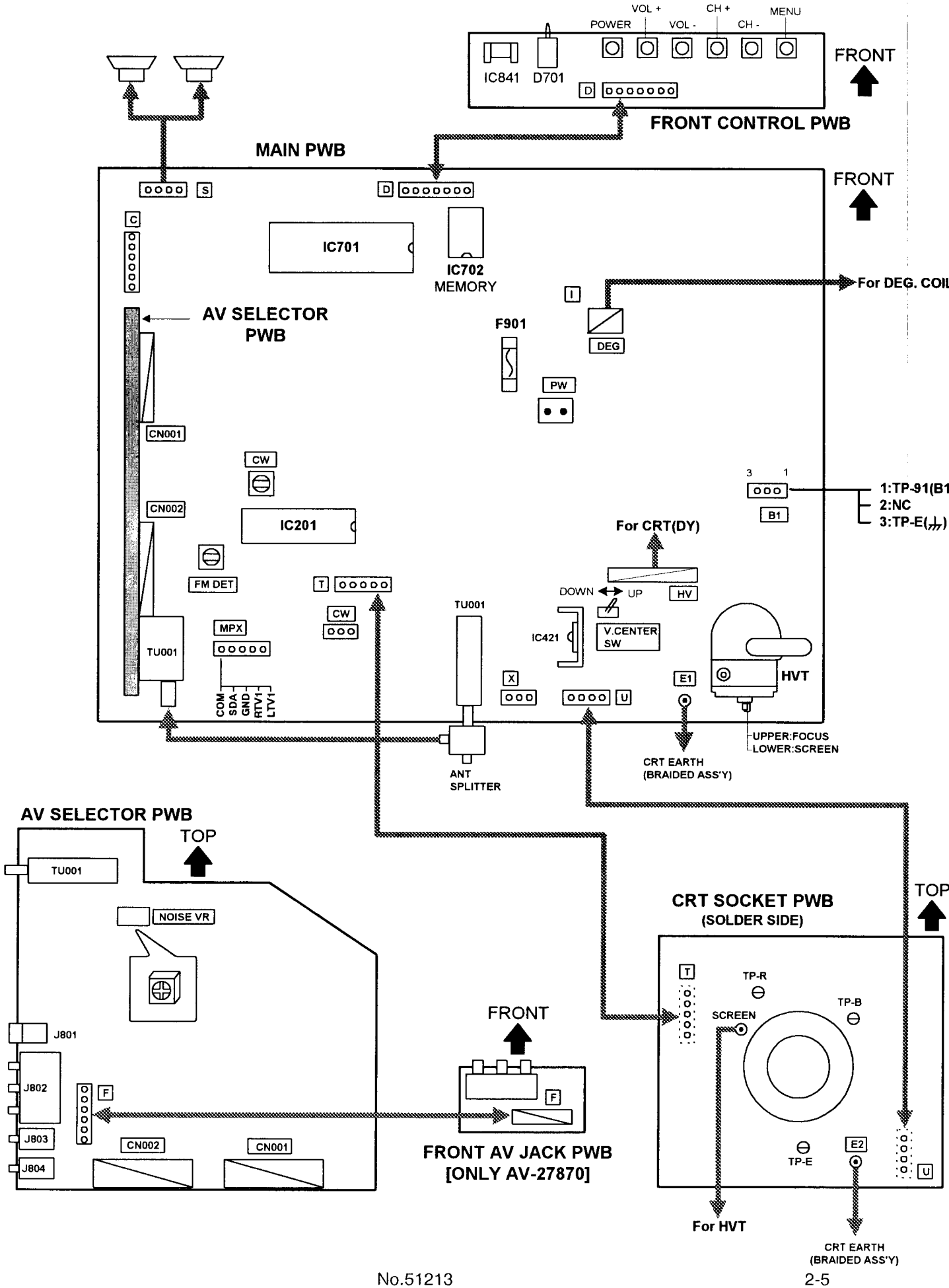
MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP.	
○	○	VL	02		I
			03		
			04		
			05		
			06		
		VH	07		II
			08		
			09		
			10		
			11		
			12		
			13		
×	○	MID	A	14	
			B	15	
			C	16	
			D	17	
			E	18	
			F	19	
			G	20	
			H	21	
			I	22	
		SUPER	J	23	
			K	24	
			L	25	
			M	26	
			N	27	
			O	28	
			P	29	III
			Q	30	
			R	31	
			S	32	
			T	33	
			U	34	
			V	35	
			W	36	
		HYPER	W + 1	37	
			W + 2	38	
			W + 3	39	
			W + 4	40	
			W + 5	41	
			W + 6	42	
			W + 7	43	
			W + 8	44	
			W + 9	45	
			W + 10	46	
			W + 11	47	
			W + 12	48	
			W + 13	49	
			W + 14	50	
			W + 15	51	
			W + 16	52	
			W + 17	53	
			W + 18	54	
			W + 19	55	
			W + 20	56	
			W + 21	57	
			W + 22	58	
			W + 23	59	
			W + 24	60	
			W + 25	61	
			W + 26	62	
			W + 27	63	
			W + 28	64	
		ULTRA	W + 29	65	
			W + 30	66	IV
			W + 31	67	
			W + 32	68	
			W + 33	69	
			W + 34	70	

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP.	
×	○	ULTRA	W + 35	71	IV
			W + 36	72	
			W + 37	73	
			W + 38	74	
			W + 39	75	
			W + 40	76	
			W + 41	77	
			W + 42	78	
			W + 43	79	
			W + 44	80	
			W + 45	81	
			W + 46	82	
			W + 47	83	
			W + 48	84	
			W + 49	85	
			W + 50	86	
			W + 51	87	
			W + 52	88	
			W + 53	89	
			W + 54	90	
			W + 55	91	
			W + 56	92	
			W + 57	93	
			W + 58	94	
			W + 59	100	
			W + 60	101	
			W + 61	102	
			W + 62	103	
			W + 63	104	
			W + 64	105	
			W + 65	106	
			W + 66	107	
			W + 67	108	
			W + 68	109	
			W + 69	110	
			W + 70	111	
			W + 71	112	
			W + 72	113	
			W + 73	114	
			W + 74	115	
			W + 75	116	
			W + 76	117	
			W + 77	118	
			W + 78	119	
			W + 79	120	
			W + 80	121	
			W + 81	122	
			W + 82	123	
			W + 83	124	
			W + 84	125	
		SUB MID	A-8	01	I
			A-4	96	
			A-3	97	II
			A-2	98	
			A-1	99	
○	×	UHF	14 ~ 69		IV

TOTAL 180CH
{ VHF 124CH
{ UHF 56CH

NOTE:
TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES.
SPECIAL ADAPTERS MAY BE REQUIRED.

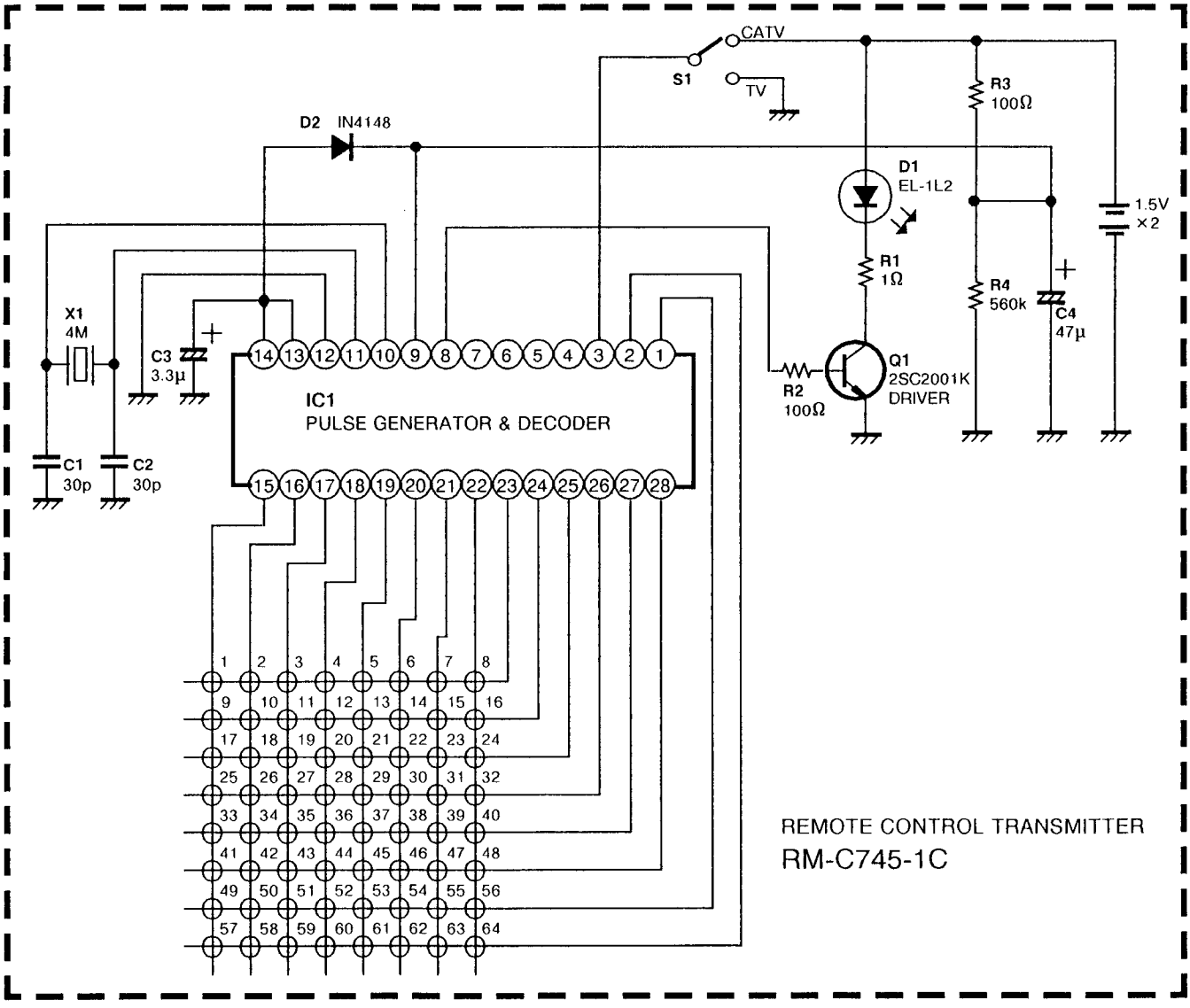
MAIN PARTS LOCATION AND ALIGNMENT LOCATION



G. COIL

P-91(B1)
C
P-E(⏚)

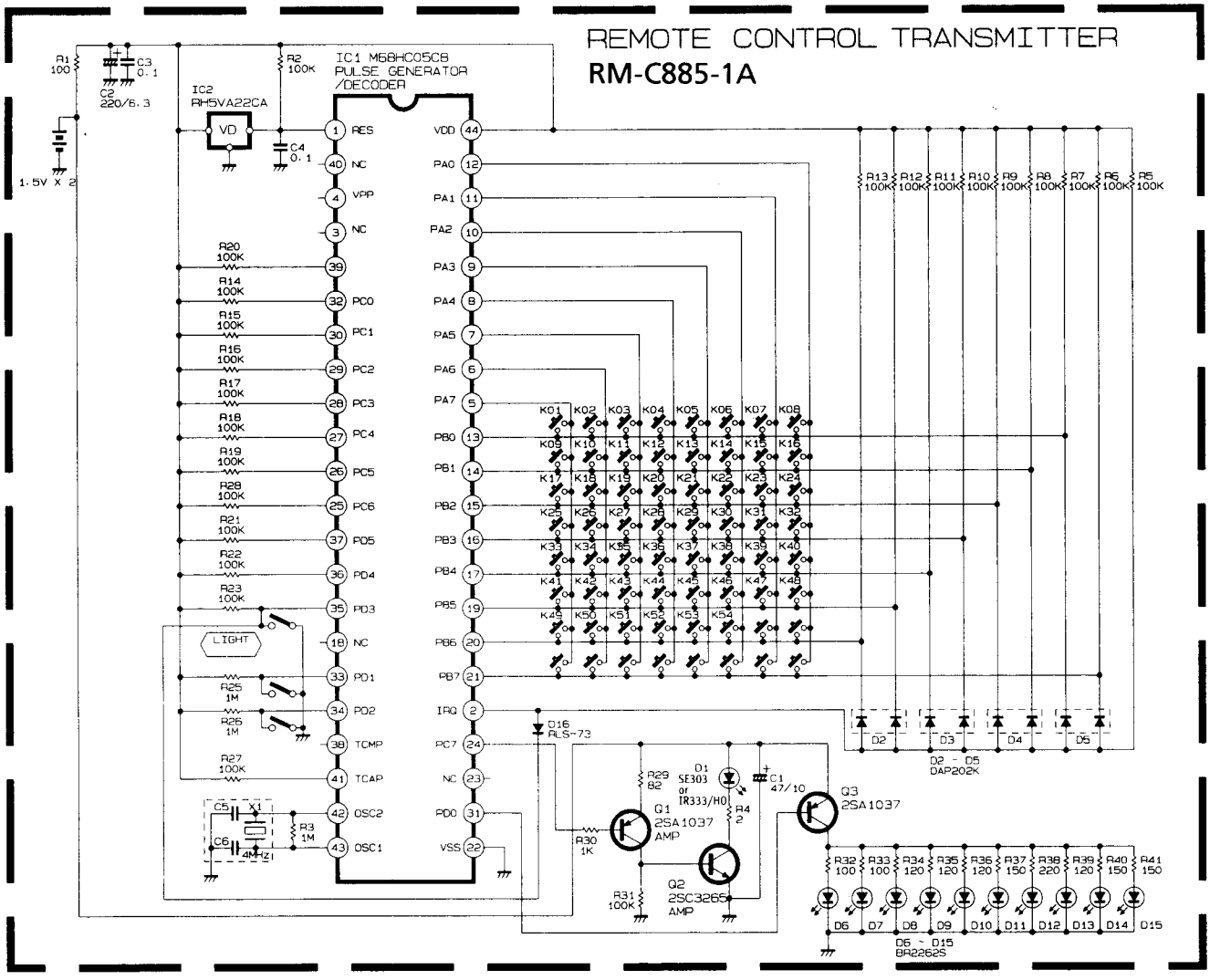
REMOTE CONTROL TRANSMITTER CIRCUIT DIAGRAM [RM-C745-1C] : [*AV-27850(US&CA)*]



■ KEY FUNCTION

No.	Key name	No.	Key name	No.	Key name	No.	Key name
9	POWER(TV)	24	3	37	VCR CHANNEL −	52	TV/VIDEO
10	MENU ▶	25	SWAP	38	CHANNEL +	53	REC ●
12	8	26	MENU ▲	41	FREEZ	54	MUTE
13	FF ▶▶	27	PIP CH +	42	VOLUME −	55	VIDEO STATUS
14	PAUSE ‖	28	0	43	PIP CH −	56	CLOSED CAPTION
15	9	29	VCR CHANNEL +	44	7	57	SOURCE
17	MOVE	30	STOP ■	45	PLAY ▶	58	MENU ◀
18	EXIT	31	RETURN +	46	CHANNEL −	60	SLEEP TIMER
19	PIP ON/OFF	32	2	47	5	61	REW ◀◀
21	VCR POWER	34	MENU ▼	49	HYPER SURROUND	63	4
22	VOLUME +	36	100 +	51	DISPLAY	64	1
23	6						

REMOTE CONTROL TRANSMITTER CIRCUIT DIAGRAM [RM-C885-1A] : [*AV-27870(US&CA)*]



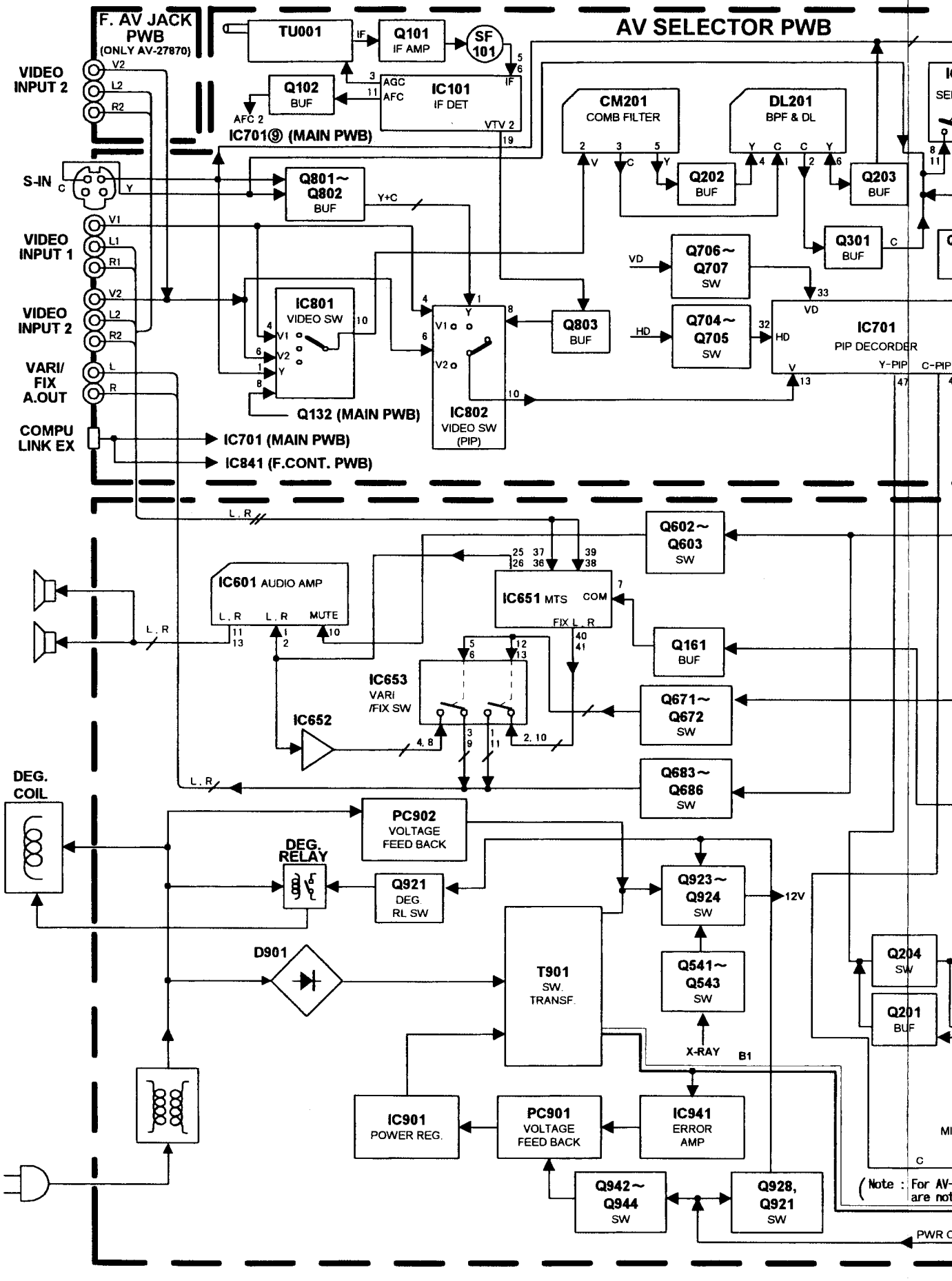
■TV/VCR/CATV SW

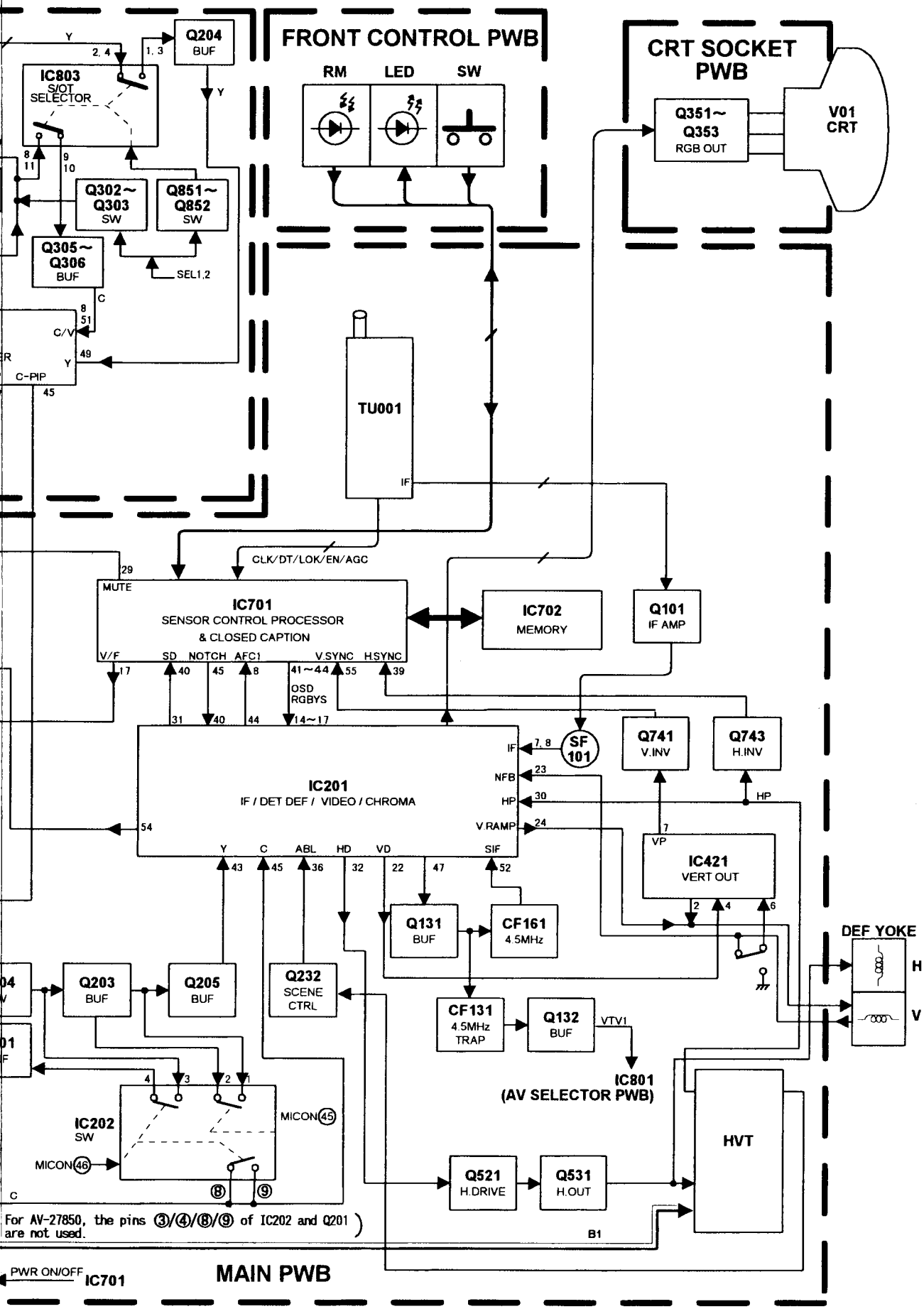
	㉝-PIN SW	㉞-PIN SW
TV	OPEN	OPEN
VCR	SHORT	OPEN
CATV	OPEN	SHORT

■ KEY FUNCTION

No.	Key name	No.	Key name	No.	Key name	No.	Key name
1	SOUND	16	1	27	SLEEP	38	MENU ▲
2	INPUT	17	2	28	100+	39	MENU ◀
3	POWER	18	3	29	0	40	MENU ▶
4	PIP SOURCE	19	CC	30	RETURN+	41	MENU ▼
5	PIP FREEZE/◀◀REW	20	4	31	CH/HYPER SCAN-		
6	PIP SWAP/PLAY▶	21	5	32	CH/HYPER SCAN+		
7	PIP MOVE/FF ▶▶	22	6	33	MUTE		
9	PIP CH-/● REC	23	STATUS	34	VOLUME-		
10	PIP CH+/■ STOP	24	7	35	VOLUME+		
11	PIP ON/OFF/❚❚PAUSE	25	8				
15	OSD	26	9	37	EXIT		

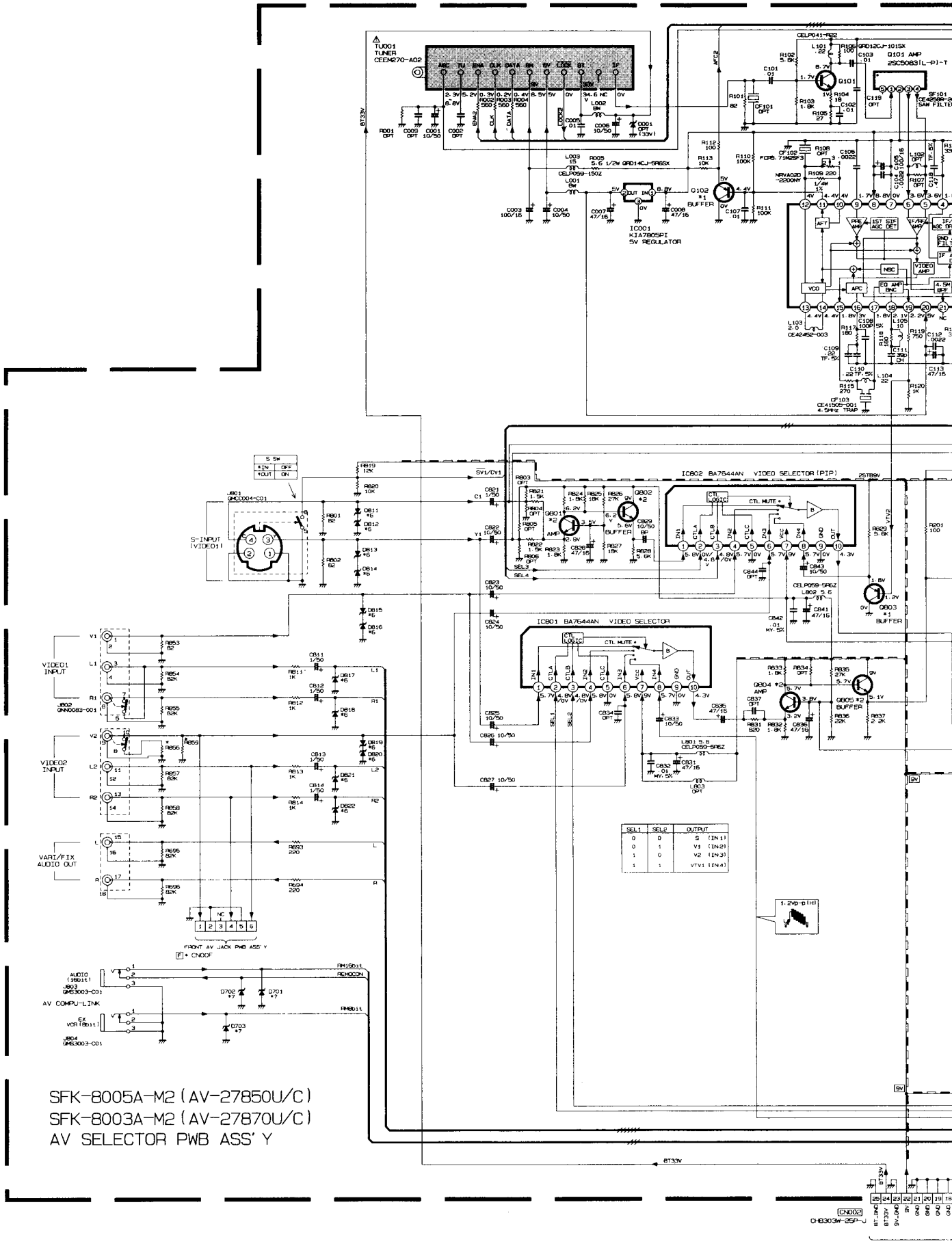
BLOCK DIAGRAM




FRONT CONTROL PWB
RM
LED
SW
CRT SOCKET PWB
Q351~ Q353 RGB OUT
V01 CRT
Q204 BUF
IC803 S/OT SELECTOR
Q302~ Q303 SW
Q851~ Q852 SW
Q305~ Q306 BUF
SEL1,2
C/V
C-PIP
TU001
IF
CLK/DT/LOK/EN/AGC
IC701
SENSOR CONTROL PROCESSOR & CLOSED CAPTION
MUTE
V/F
SD
NOTCH
AFC1
V.SYNC
H.SYNC
OSD RGBYS
IC702 MEMORY
Q101 IF AMP
IC201
IF / DET DEF / VIDEO / CHROMA
SF 101
Q741 V.INV
Q743 H.INV
HP
VP
IC421 VERT OUT
Q131 BUF
CF161 4.5MHz
DEF YOKE
H
V
Q203 BUF
Q205 BUF
Q232 SCENE CTRL
CF131 4.5MHz TRAP
Q132 BUF
VTV1
IC801 (AV SELECTOR PWB)
IC202 SW
MICON
HVT
Q521 H.DRIVE
Q531 H.OUT
For AV-27850, the pins ③/④/⑧/⑨ of IC202 and Q201 are not used.
PWR ON/OFF
IC701
MAIN PWB

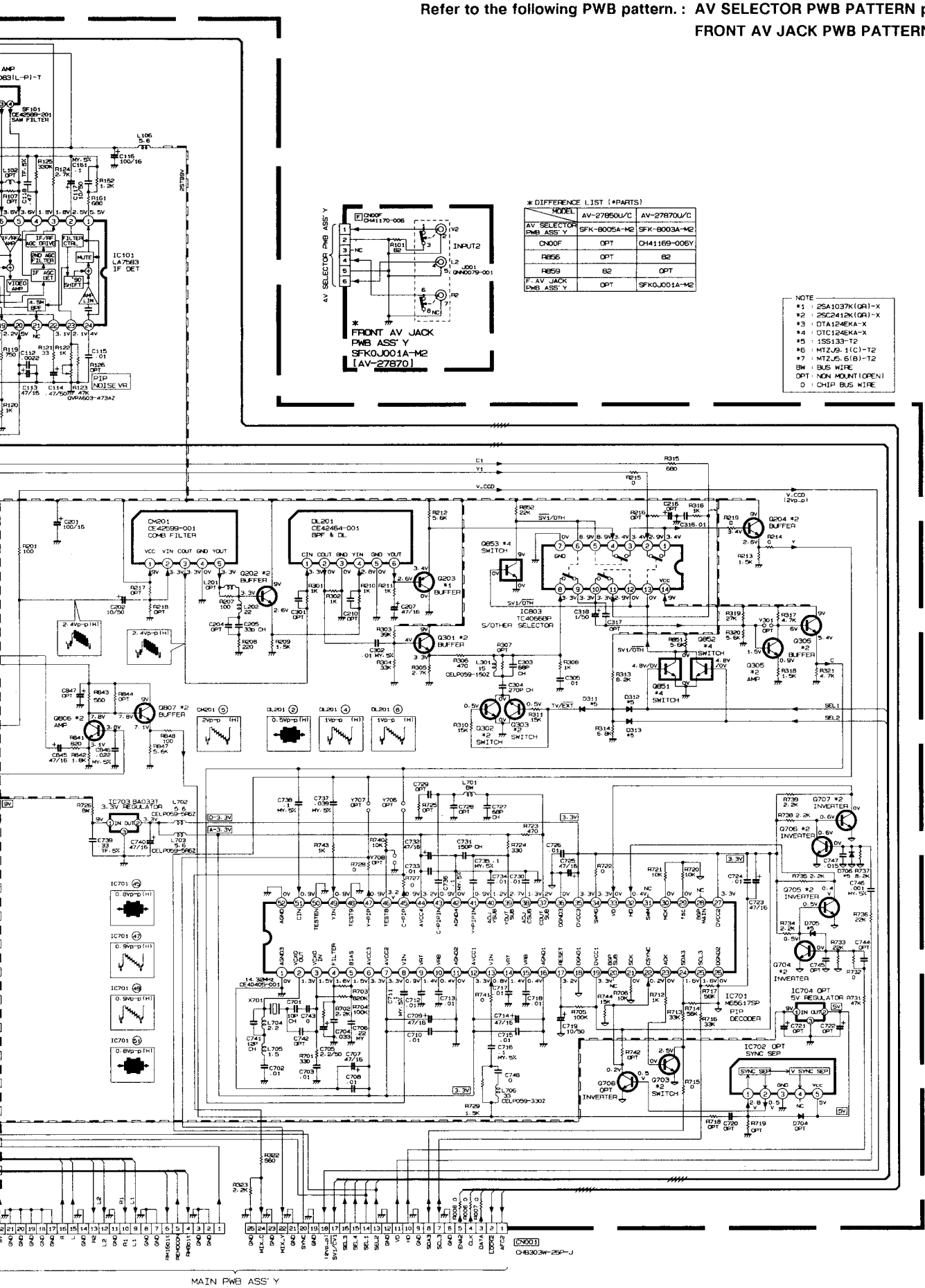
CIRCUIT DIAGRAMS AND PWB PATTERNS

AV SELECTOR PWB AND FRONT AV JACK PWB CIRCUIT DIAGRAMS

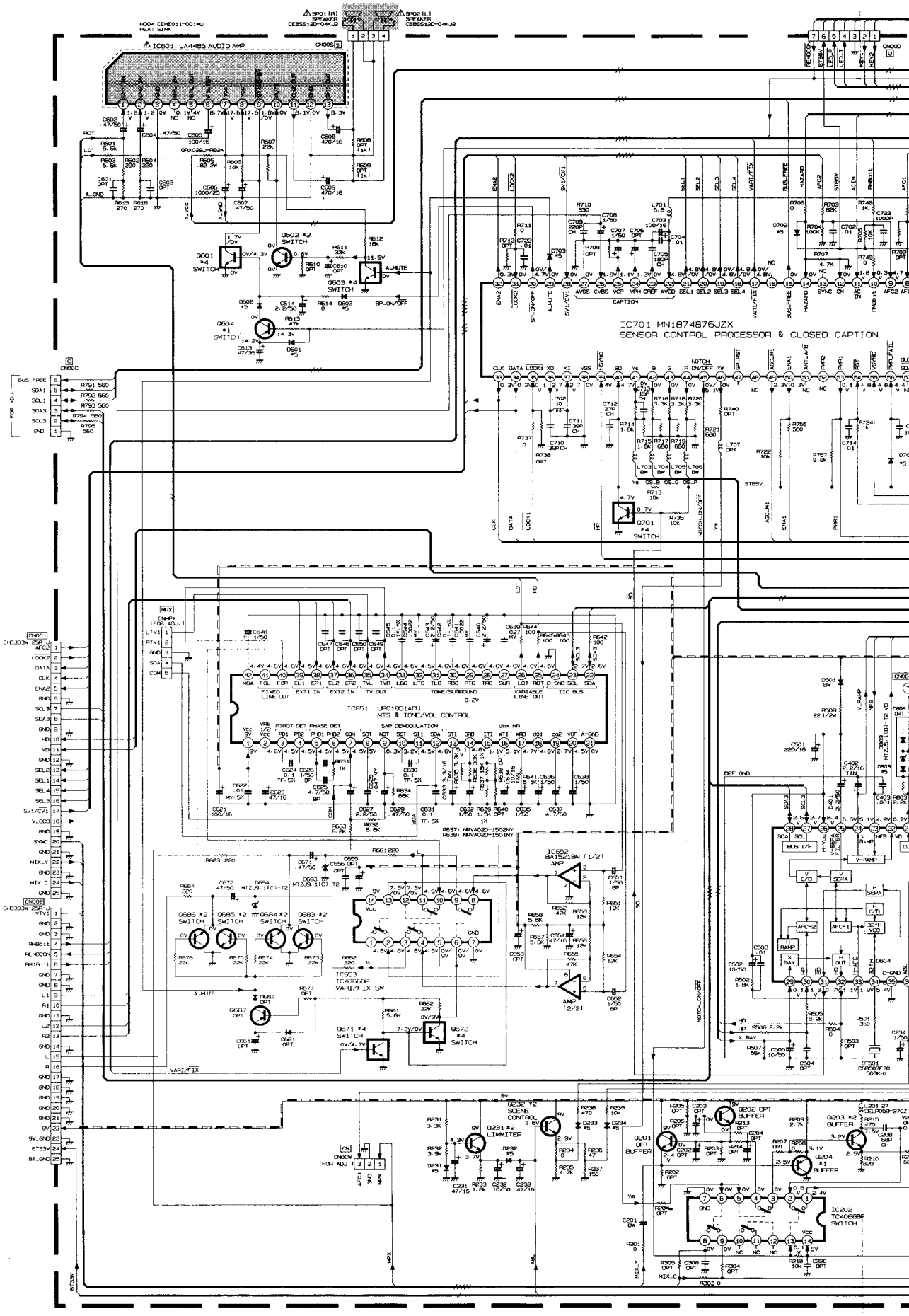


This schematic diagram is applicable to both (US) and (CA) models.
As for the parts (marked by ∗) in the diagram, refer to the difference list (also marked by ∗ for the parts).

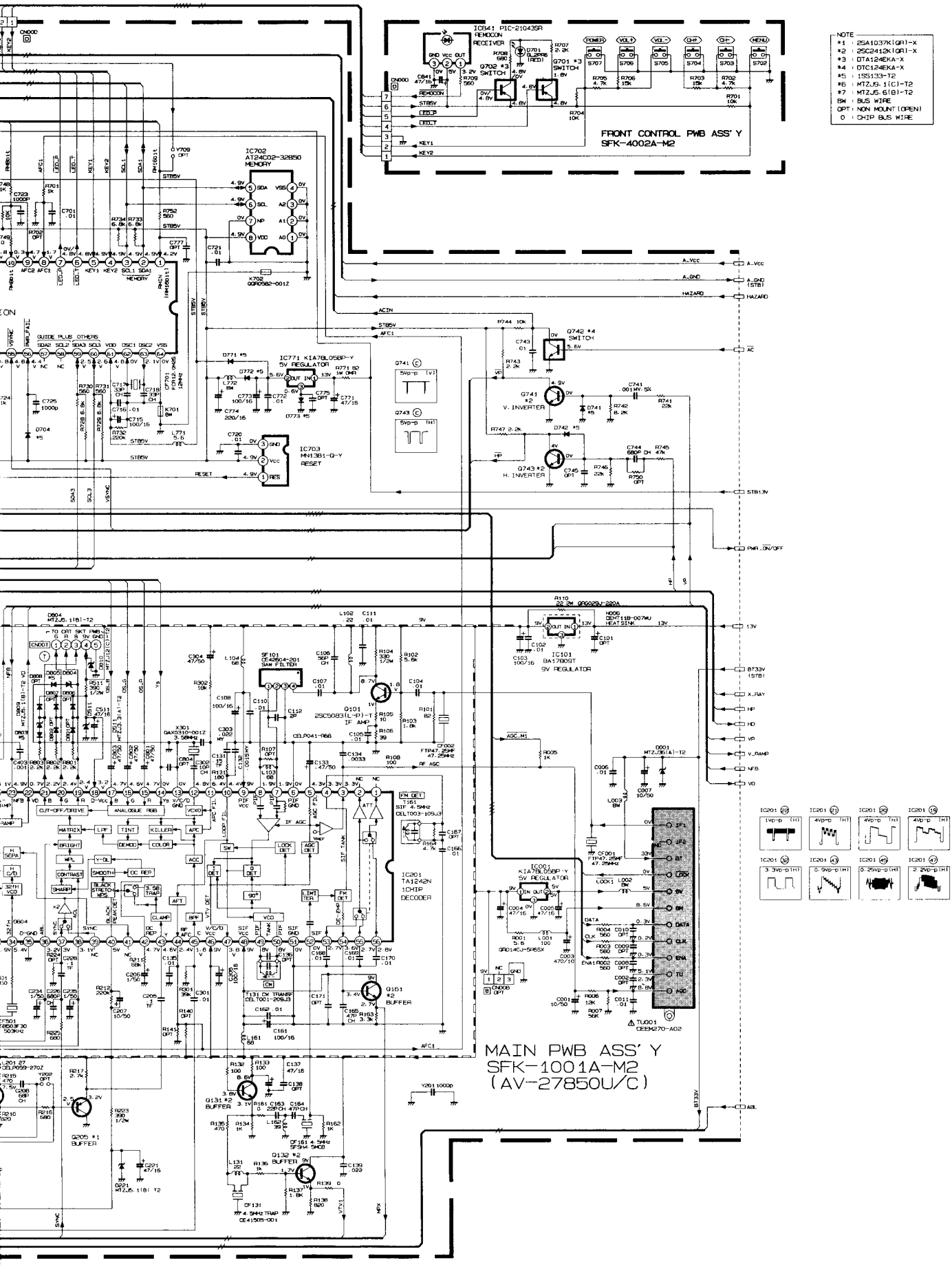
Refer to the following PWB pattern. : AV SELECTOR PWB PATTERN page 2-21, FRONT AV JACK PWB PATTERN page 2-23.



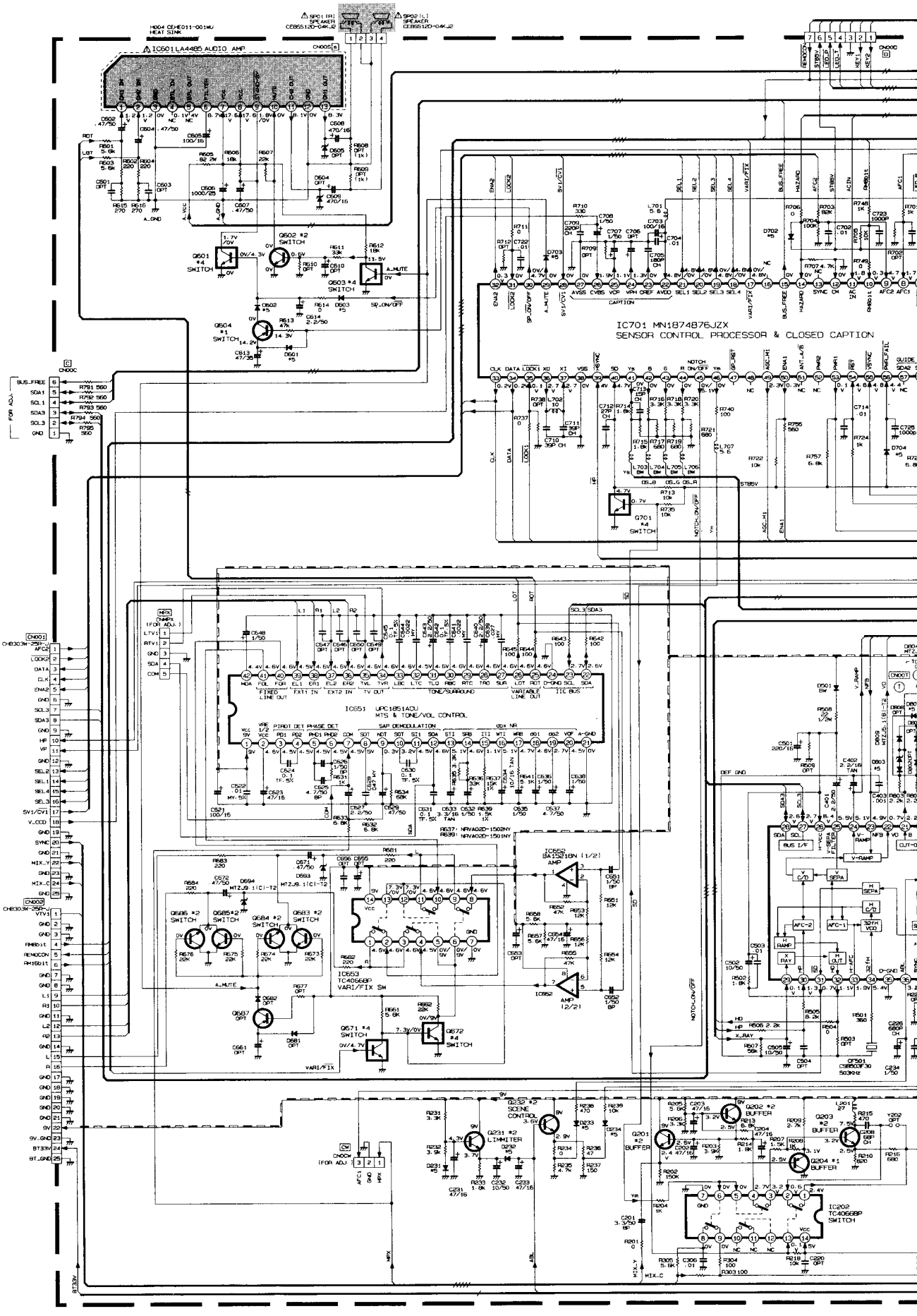
MAIN PWB and FRONT CONTROL PWB CIRCUIT DIAGRAMS [AV-27850(US&CA)]



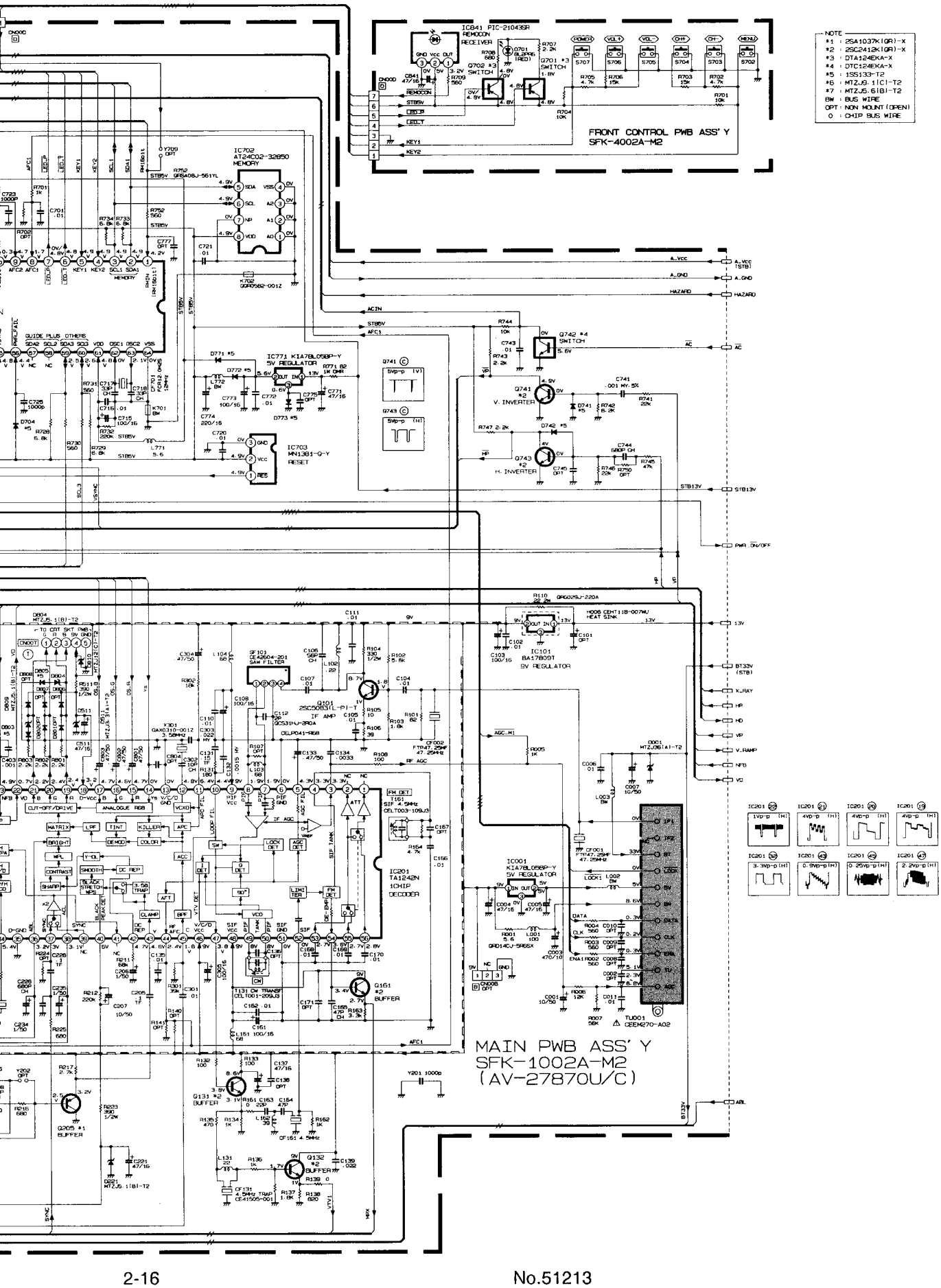
Refer to the following PWB pattern. : MAIN PWB PATTERN page 2-19~2-20, FRONT CONTROL PWB PATTERN page 2-23.



MAIN PWB and FRONT CONTROL PWB CIRCUIT DIAGRAMS [AV-27870(US&CA)]

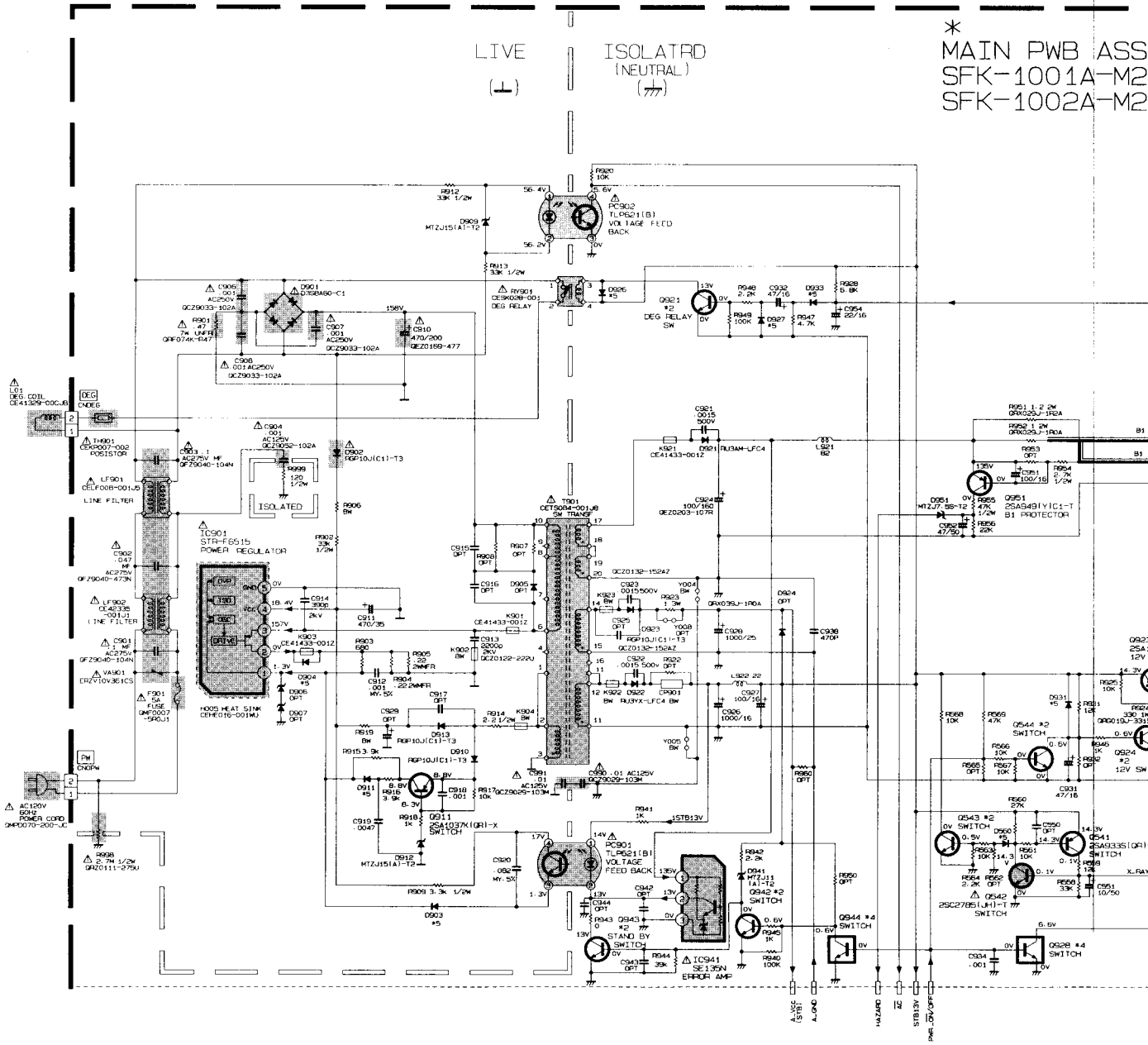


Refer to the following PWB pattern. : MAIN PWB PATTERN page 2-19~2-20, FRONT CONTROL PWB PATTERN page 2-23.

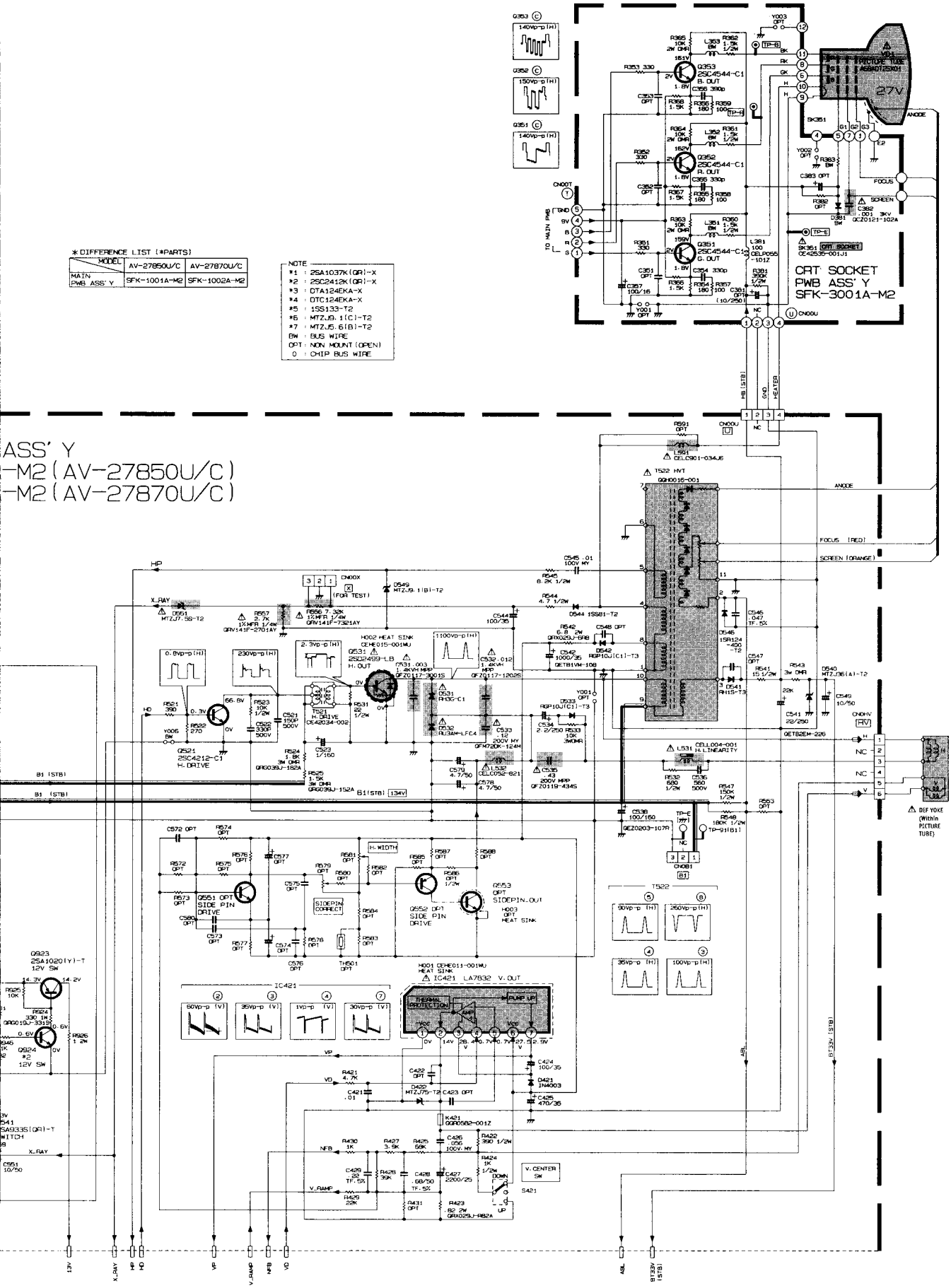


MAIN PWB and CRT SOCKET PWB CIRCUIT DIAGRAMS

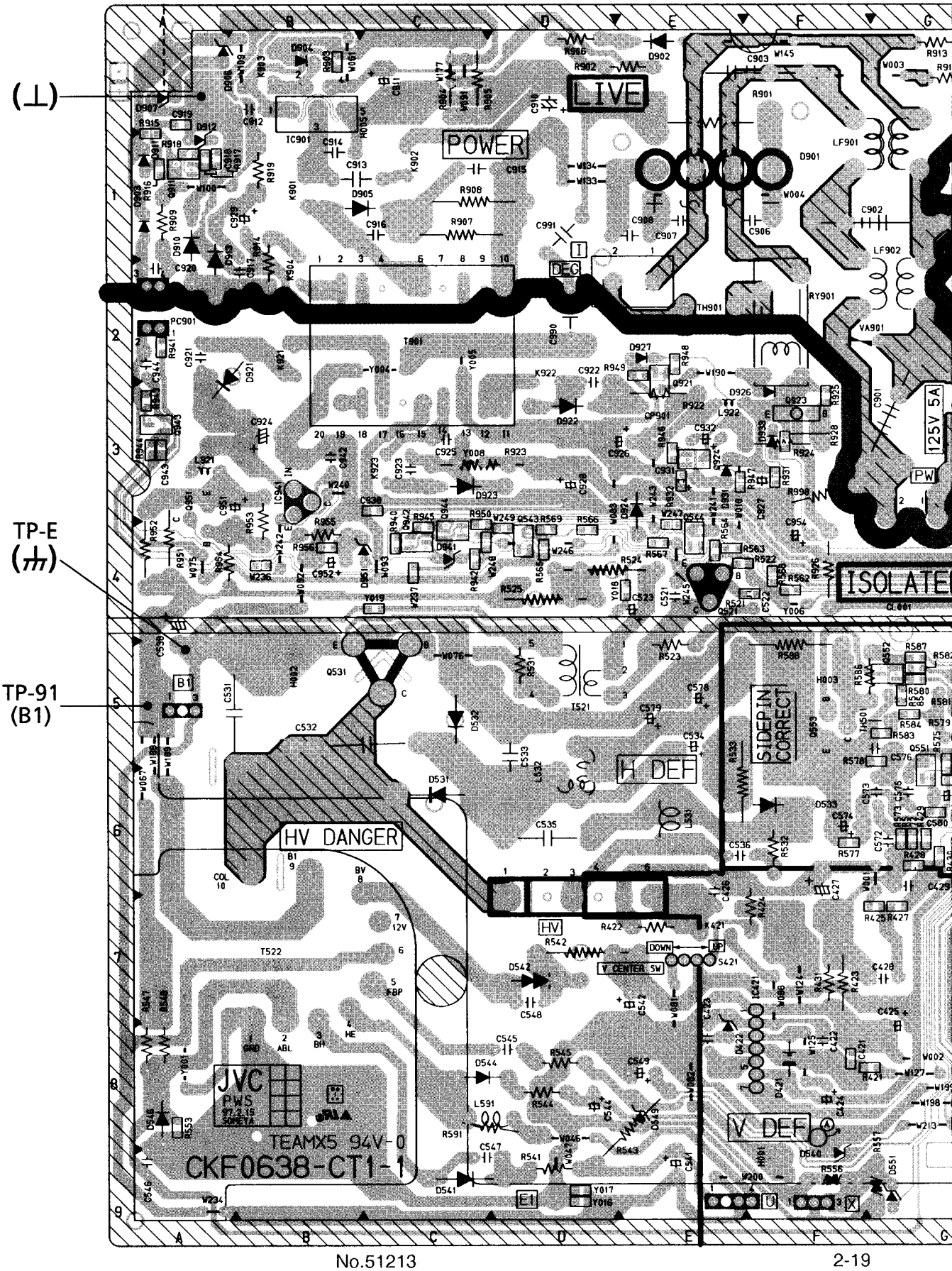
[AV-27850(US&CA)]
[AV-27870(US&CA)]



Refer to the following PWB pattern. : CRT SOCKET PWB PATTERN page 2-22.

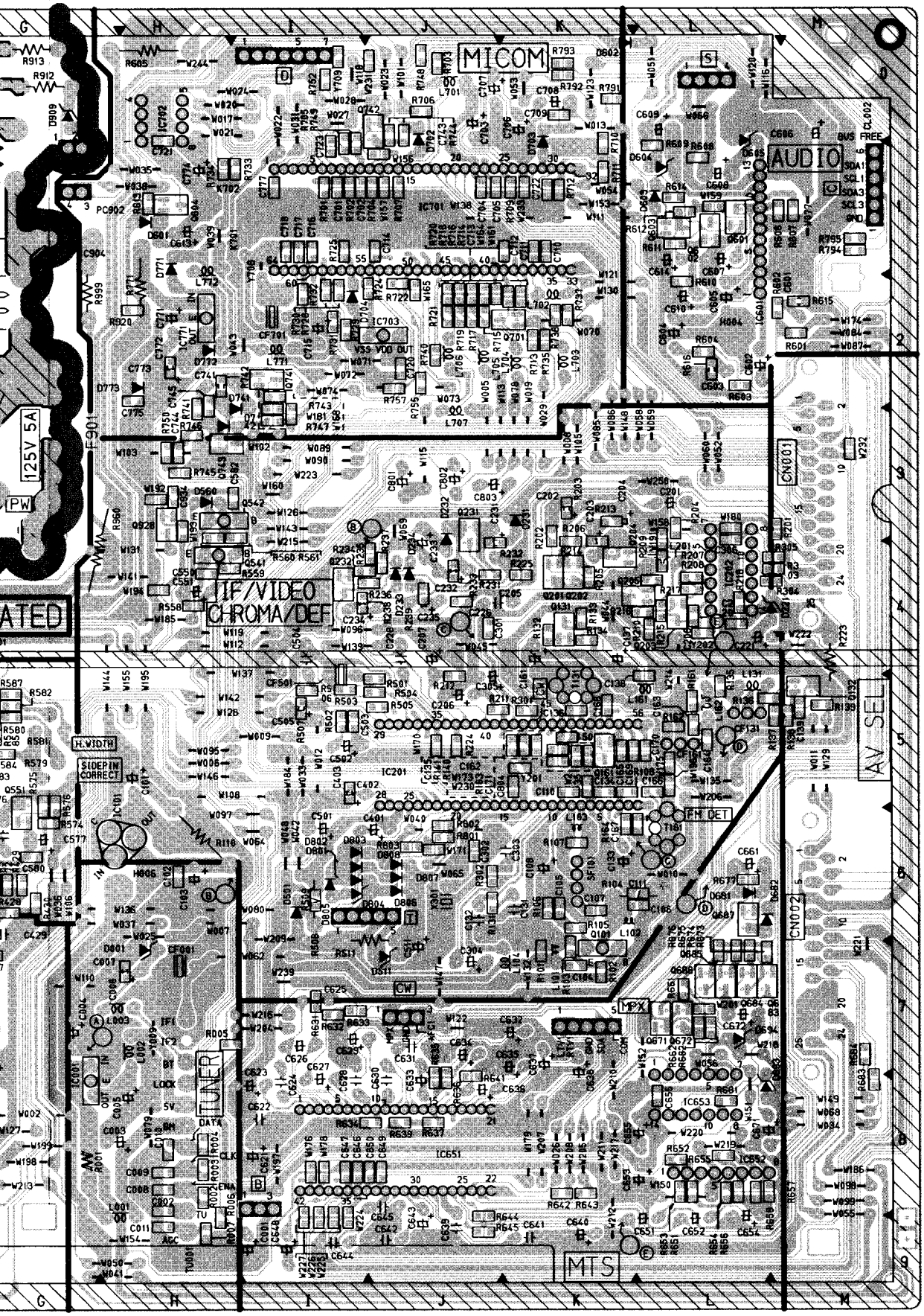


MAIN PWB PATTERN [SFK-1001A-M2 : *AV-27850(US&CA)*]
[SFK-1002A-M2 : *AV-27870(US&CA)*]



(Magnification Rate 95%)

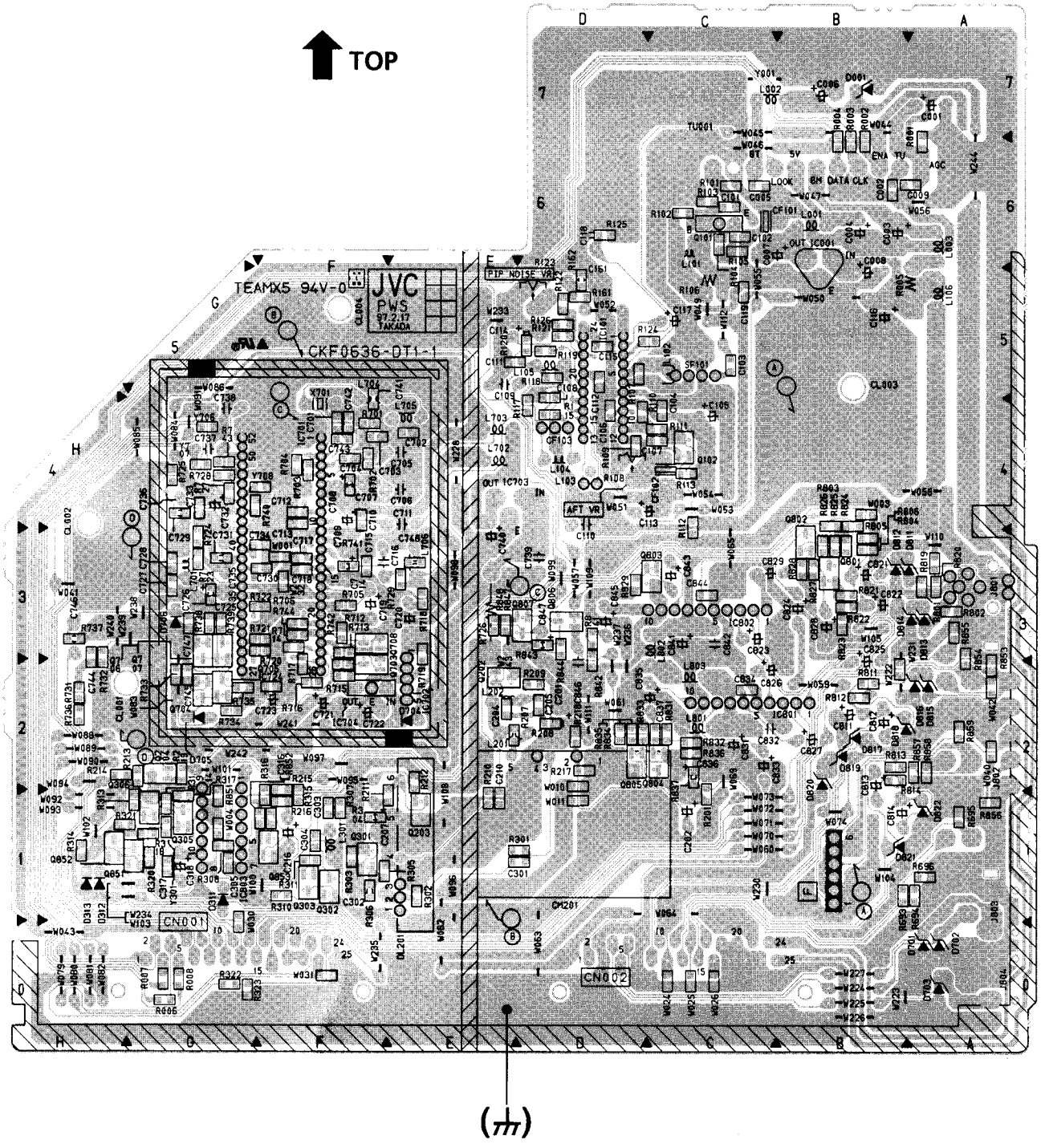
FRONT



AV SELECTOR PWB PATTERN

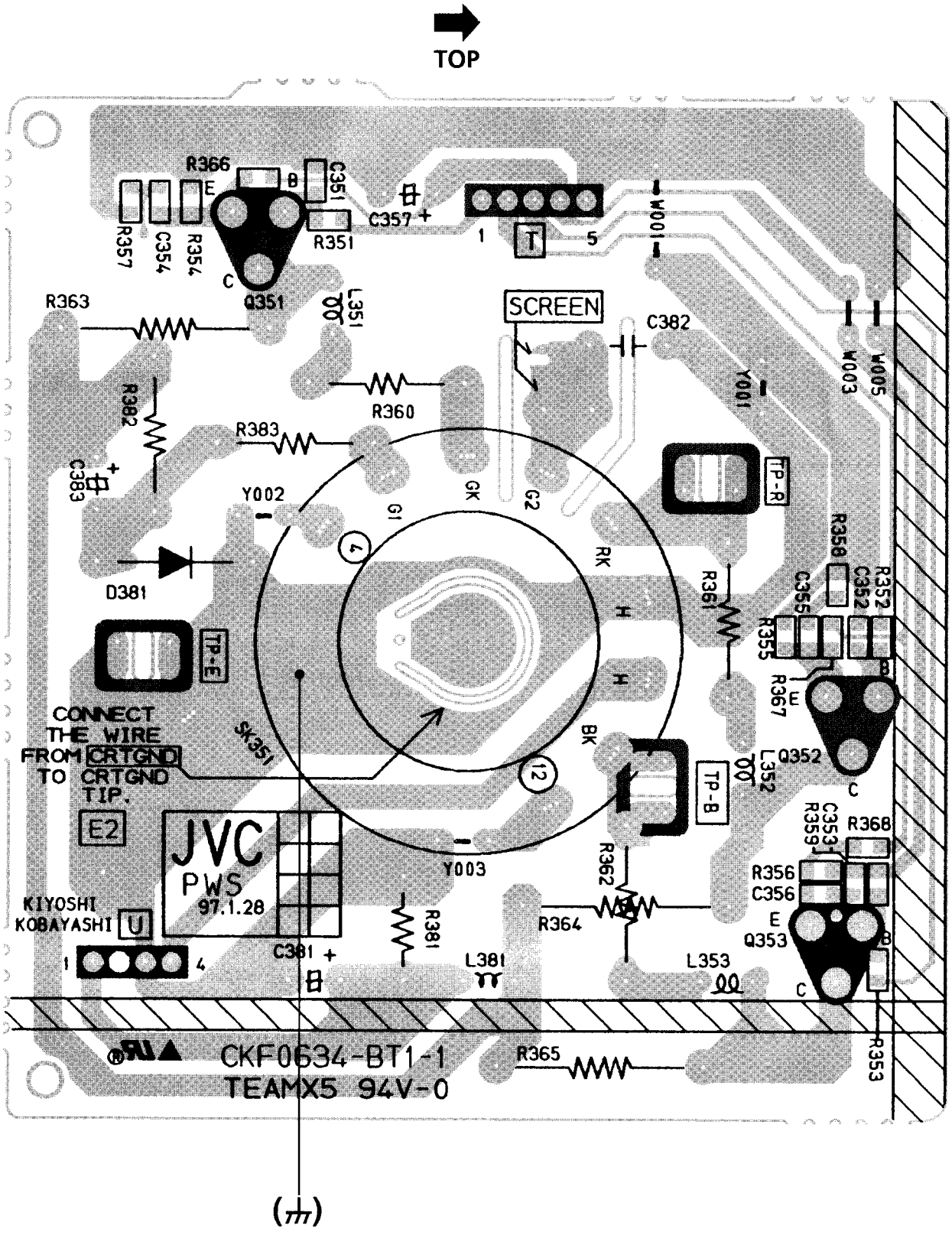
[SFK-8005A-M2 : *AV-27850(US&CA)*]
[SFK-8003A-M2 : *AV-27870(US&CA)*]

(Magnification Rate 86%)



CRT SOCKET PWB PATTERN [SFK-3001A-M2]

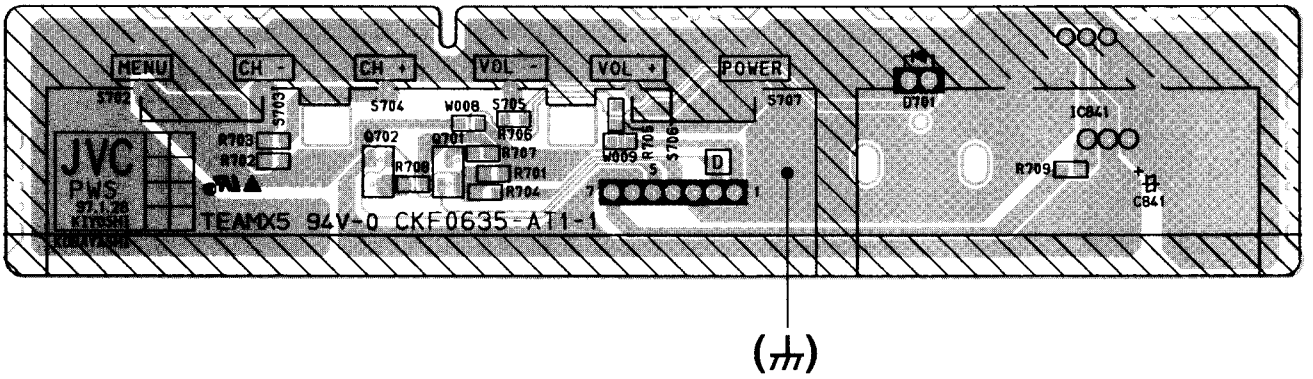
(Magnification Rate 180%)



FRONT CONTROL PWB PATTERN [SFK-4002A-M2]

(Magnification Rate 108%)

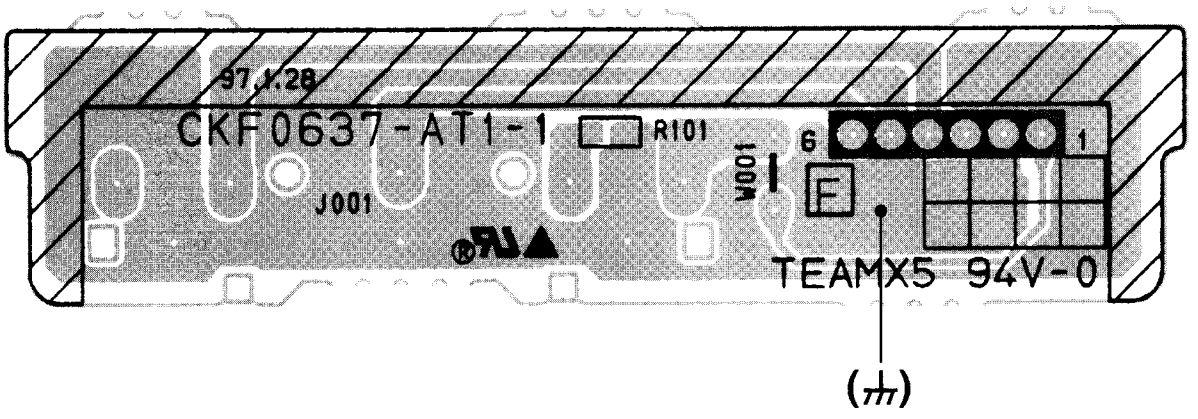
FRONT



FRONT AV JACK PWB PATTERN [*ONLY AV-27870(US&CA)*] [SFK0J001A-M2]

(Magnification Rate 200%)

FRONT



PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines —— in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .
- As a rule, the resistors and capacitors which are indicated as shown in "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS" are not shown in the list of the parts on the board .
  When ordering the service parts, confirm the resistance/rated power, capacitance/rated voltage, and type of the parts, then order by the part No. indicated according to "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS" .

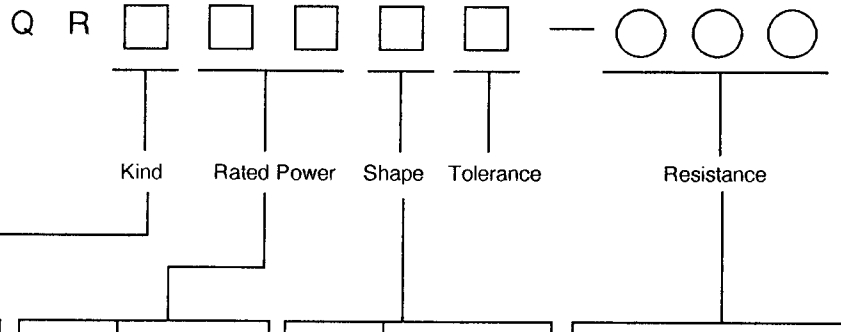
ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% - 10%	+50% - 10%	+80% - 20%	+100% - 0%

HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS

■ RESISTOR



Symbol	Part Name
C	COMP.R
D	C R
S	CH MG R

Symbol	Rated Power
0 1	1 w
1 2	1/2 w
1 4	1/4 w
1 6	1/6 w
1 8	1/8 w

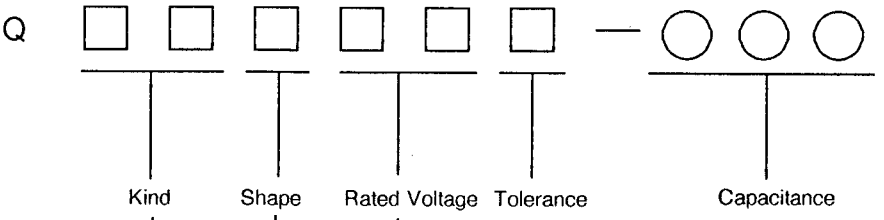
Symbol	Shape
1	Straight lead
8	Chip

Indicate with first two-figure expressed by Ω and following 0.
please note that,in case of resistance less than 10 Ω, a letter "R"will be effective as point.

EX.

2.2 Ω	=		2R2
470 Ω	=	47×10^{1} →	471
150kΩ	=	15×10^{4} →	154

■ CAPACITOR



Symbol	Part Name
CS	C CAP.
CS	CH C CAP.
ET	E CAP.
FM	M CAP.

6Figure \ 5Figure	0	1	2
A		10V	100V
C		16V	160V
D			200V
E		25V	250V
H		50V	500V
J	6.3V	63V	
V		35V	

Indicate with first two-figure expressed by pF and following 0.
Please note that,in case of capacitance less than 10 pF a letter "R" will be effective as point.

EX

5pF	=		5R0
1000pF	=	10×10^{2} →	102
47μF	=	47×10^{6} →	476

Symbol	Shape
1	Straight lead
1	Leads in the same direction
8	Chip
A	Leads in the same direction (compact part)

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- AV-27870(US&CA)

USING P.W. BOARD & REMOTE CONTROL UNIT

Model / P.W.B ASS'Y	AV-27850(US&CA)	AV-27870(US&CA)
MAIN P.W.B	SFK-1001A-M2	SFK-1002A-M2
CRT SOCKET P.W.B	SFK-3001A-M2	←
FRONT CONTROL P.W.B	SFK-4002A-M2	←
AV SELECTOR P.W.B	SFK-8005A-M2	SFK-8003A-M2
FRONT AV JACK P.W.B	×	SFK0J001A-M2
REMOTE CONTROL UNIT	RM-C745-1C	RM-C885-1A

EXPLODED VIEW PARTS LIST

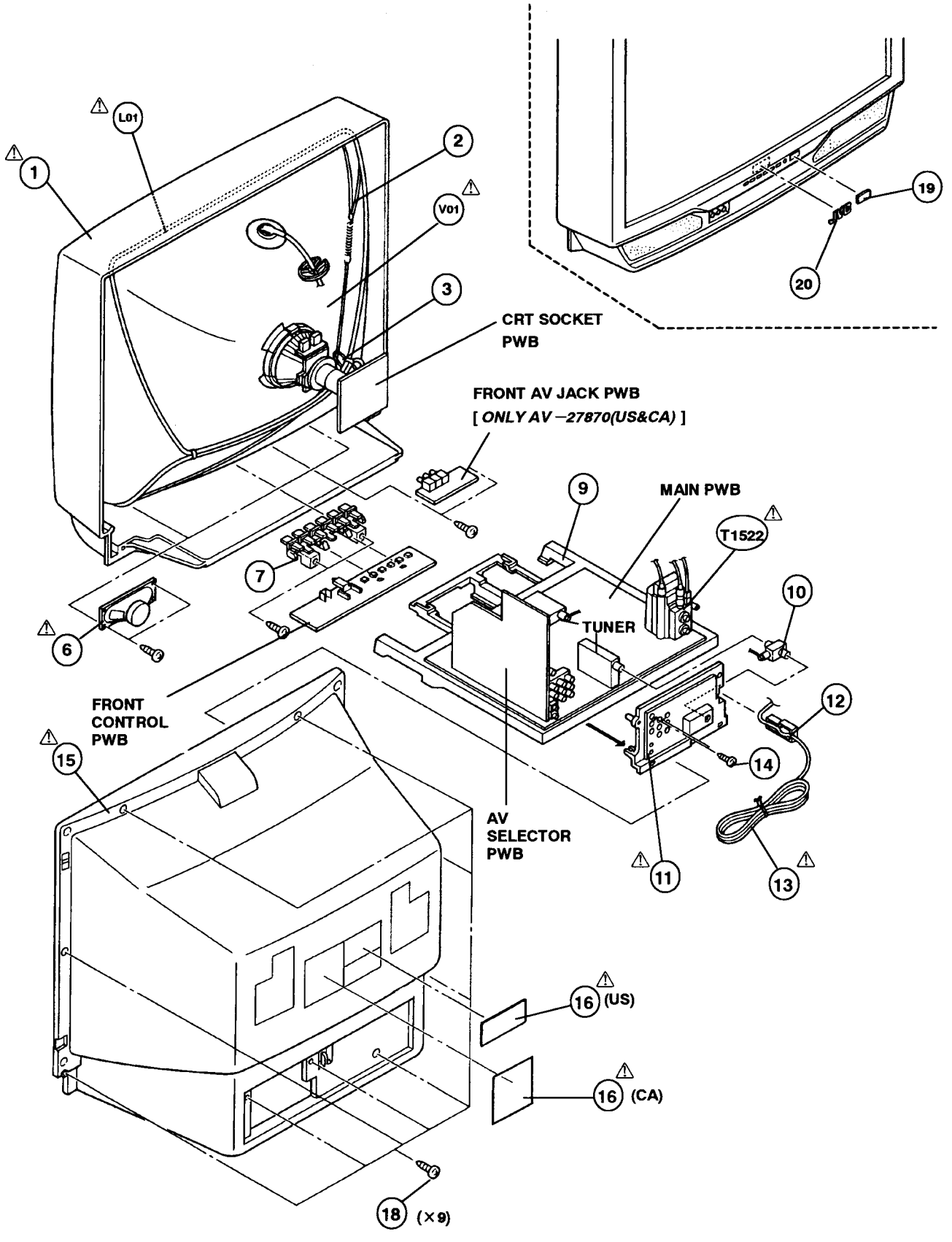
[AV-27850(US&CA)]

⚠	Ref. No.	Part No.	Part Name	Description	Local
⚠	V01	A68ADT25X01	ITC TUBE(C)	Inc.DY	*
⚠	L01	CE41329-00CJB	DEG COIL		*
⚠	T1522	QQH0016-001	H.V.TRANSF.		*
⚠	1	CM12919-A01-MA	FRONT CABINET		*
	2	CHGB0015-0B	BRAIDED WIRE		*
	3	CHGB0016-0C	BRAIDED WIRE		*
⚠	6	CEBSS12D-04KJ2	SPEAKER	(×2)SP01,SP02	*
	7	CM36568-B01-VA	PUSH KNOB		*
	9	CM12689-B01-VA	CHASSIS BASE		*
	10	CEGA008-001	ANT SPLITTER		*
⚠	11	CM23125-A01-VA	TERMINAL BOARD		*
	12	CM48140-A03-A	CORD CLAMP		*
⚠	13	QMPD070-200-JC	POWER CORD		*
	14	SBSB3010Z	TAPPING SCREW	(×2)	*
⚠	15	CM12920-C01-MA	REAR COVER		*
⚠	16	CM23034-001-A	RATING LABEL	(US)	*
⚠	16	CM22999-001-A	RATING LABEL	(CA)	*
	18	GBSB4016Z	TAPPING SCREW	(×9)	*
	19	CM35983-001-H	REMOCON WINDOW		*
	20	CM48006-A03-H	JVC MARK		*

[AV-27870(US&CA)]

⚠	Ref. No.	Part No.	Part Name	Description	Local
⚠	V01	A68ADT25X01	ITC TUBE(C)	Inc.DY	*
⚠	L01	CE41329-00CJB	DEG COIL		*
⚠	T1522	QQH0016-001	H V TRANSF.		*
⚠	1	CM12919-A02-MA	FRONT CABINET		*
	2	CHGB0015-0B	BRAIDED WIRE		*
	3	CHGB0016-0C	BRAIDED WIRE		*
⚠	6	CEBSS12D-04KJ2	SPEAKER	(×2)SP01,SP02	*
	7	CM36568-B01-VA	PUSH KNOB		*
	9	CM12689-B01-VA	CHASSIS BASE		*
	10	CEGA008-001	ANT SPLITTER		*
⚠	11	CM23125-A01-VA	TERMINAL BOARD		*
	12	CM48140-A03-A	CORD CLAMP		*
⚠	13	QMPD070-200-JC	POWER CORD		*
	14	SBSB3010Z	TAPPING SCREW	(×2)	*
⚠	15	CM12920-C01-MA	REAR COVER		*
⚠	16	CM23034-001-A	RATING LABEL	(US)	*
⚠	16	CM22999-001-A	RATING LABEL	(CA)	*
	18	GBSB4016Z	TAPPING SCREW	(×9)	*
	19	CM35983-001-H	REMOCON WINDOW		*
	20	CM48006-A03-H	JVC MARK		*

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST

AV-27850(US&CA)

MAIN PW BOARD ASS'Y (SFK-1001A-M2)

⚠	Symbol No.	Part No.	Part Name	Description			Local
	RESISTOR						
	R1001	QRD14CJ-5R6SX	C R	5.6 Ω	1/4W	J	*
	R1110	QRG029J-220A	OM R	22 Ω	2W	J	*
	R1423	QRX029J-R82A	MF R	0.82 Ω	2W	J	*
	R1524	QRG039J-182A	OM R	1.8kΩ	3W	J	*
	R1525	QRG039J-152A	OM R	1.5kΩ	3W	J	*
	R1533	QRG039J-103A	OM R	10kΩ	3W	J	*
	R1541	QRD129J-150S	C R	15 Ω	1/2W	J	*
	R1542	QRX029J-6R8	MF R	6.8 Ω	2W	J	*
	R1543	QRG039J-223A	OM R	22kΩ	3W	J	*
	R1544	QRD129J-4R7S	C R	4.7 Ω	1/2W	J	*
⚠	R1556	QRV141F-7321AY	MF R	7.32kΩ	1/4W	F	*
⚠	R1557	QRV141F-2701AY	MF R	2.7kΩ	1/4W	F	*
	R1605	QRX029J-R82A	MF R	0.82 Ω	2W	J	*
	R1637	NRVA02D-1502NY	MF R	15kΩ	1/10W	±0.5%	*
	R1639	NRVA02D-1501NY	MF R	1.5kΩ	1/10W	±0.5%	*
	R1771	QRG019J-820S	OM R	82 Ω	1W	J	*
⚠	R1901	QRF074K-R47	UNF R	0.47 Ω	7W	K	*
	R1904-05	QRX029J-R22A	MF R	0.22 Ω	2W	J	*
	R1923	QRX039J-1R0A	MF R	1.0 Ω	3W	J	*
	R1924	QRG019J-331S	OM R	330 Ω	1W	J	*
	R1926	QRX029J-1R0A	MF R	1 Ω	2W	J	*
	R1951	QRX029J-1R2A	MF R	1.2 Ω	2W	J	*
	R1952	QRX029J-1R0A	MF R	1 Ω	2W	J	*
⚠	R1998	QRZ0111-275U	C R	2.7MΩ	1/2W		*
	CAPACITOR						
	C1006	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1011	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1102	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1104-05	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1106	NCT03CH-560AY	CHIP CAP.	56pF	50V	J	*
	C1107	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1110-11	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1131	QFV71HJ-154MZ	TF CAP.	0.15μF	50V	J	*
	C1132	QFLC1HK-152MZ	M CAP.	1500pF	50V	K	
	C1134	NCB21HK-332AY	CHIP CAP.	3300pF	50V	K	*
	C1135	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1139	NCB21HK-223AY	CHIP CAP.	0.022μF	50V	K	*
	C1162	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1163	NCT03CH-220AY	CHIP CAP.	22pF	50V	J	*
	C1164-65	NCT03CH-470AY	CHIP CAP.	47pF	50V	J	*
	C1166	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1168-70	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1205	QFLC1HJ-104MZ	M CAP.	0.1μF	50V	J	*
	C1208	NCT03CH-680AY	CHIP CAP.	68pF	50V	J	*
	C1226	NCT03CH-681AY	CHIP CAP.	680pF	50V	J	*
	C1228	QFLC1HJ-104MZ	M CAP.	0.1μF	50V	J	*
	C1301	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1302	NCT03CH-100AY	CHIP CAP.	10pF	50V	J	*
	C1303	QFLC1HK-223MZ	M CAP.	0.022μF	50V	K	
	C1402	QEE61CK-225BZ	TAN.CAP.	2.2μF	16V	K	
	C1403	NCB21HK-102AY	CHIP CAP.	1000pF	50V	K	*
	C1421	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1424	QETC1VM-107Z	E CAP.	100μF	35V	M	*
	C1425	QETC1VM-477Z	E CAP.	470μF	35V	M	*
	C1426	QFLC2AK-563MZ	M CAP.	0.056μF	100V	K	*
	C1428	QFV71HJ-684MZ	TF CAP.	0.68μF	50V	J	*
	C1429	QFV71HJ-224MZ	TF CAP.	0.22μF	50V	J	*
	C1503	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1523	QETC2CM-105Z	E CAP.	1μF	160V	M	*

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⚠	Symbol No.	Part No.	Part Name	Description			Local
	CAPACITOR						
⚠	C1531	QFZ0117-3001S	MPP CAP.	3000 p F	1.4kVH	±2.5%	*
⚠	C1532	QFZ0117-1202S	MPP CAP.	0.012 μ F	1.4kVH	±2.5%	*
⚠	C1533	QFM72DK-124M	M CAP.	0.12 μ F	200V	K	
	C1534	QEHC2EM-225MZ	E CAP.	2.2 μ F	250V	M	*
⚠	C1535	QFZ0119-434S	MPP CAP.	0.43 μ F	200V	±3%	*
	C1538	QEZ0203-107R	E CAP.	100 μ F	160V		
	C1541	QETB2EM-226	E CAP.	22 μ F	250V	M	*
	C1542	QETB1VM-108	E CAP.	1000 μ F	35V	M	*
	C1544	QETC1VM-107Z	E CAP.	100 μ F	35V	M	*
	C1545	QFLC2AJ-103MZ	M CAP.	0.01 μ F	100V	J	*
	C1546	QFV71HJ-473MZ	TF CAP.	0.047 μ F	50V	J	
	C1578-79	QEM61HK-475MZ	E CAP.	4.7 μ F	50V	K	
	C1613	QETC1VM-476Z	E CAP.	47 μ F	35V	M	*
	C1622	QFLC1HJ-103MZ	M CAP.	0.01 μ F	50V	J	*
	C1624	QFLC1HJ-104MZ	M CAP.	0.1 μ F	50V	J	*
	C1625	QEN61HM-475Z	BP E CAP.	4.7 μ F	50V	M	*
	C1626	QEN61HM-105Z	BP E CAP.	1 μ F	50V	M	*
	C1628	QFLC1HK-473MZ	M CAP.	0.047 μ F	50V	K	
	C1630-31	QFLC1HJ-104MZ	M CAP.	0.1 μ F	50V	J	*
	C1633	QEE61CK-335BZ	TAN.CAP.	3.3 μ F	16V	K	
	C1634	QEE61CK-106BZ	TAN.CAP.	10 μ F	16V	K	
	C1639	QFLC1HK-273MZ	M CAP.	0.027 μ F	50V	K	
	C1641	QFLC1HK-222MZ	M CAP.	2200 p F	50V	K	
	C1642	QFLC1HJ-104MZ	M CAP.	0.1 μ F	50V	J	*
	C1644	QFLC1HK-222MZ	M CAP.	2200 p F	50V	K	
	C1645	QFLC1HJ-104MZ	M CAP.	0.1 μ F	50V	J	*
	C1651-52	QEN61HM-105Z	BP E CAP.	1 μ F	50V	M	*
	C1701-02	NCB21HK-103AY	CHIP CAP.	0.01 μ F	50V	K	*
	C1704	NCB21HK-103AY	CHIP CAP.	0.01 μ F	50V	K	*
	C1705	NCT03CH-181AY	CHIP CAP.	180 p F	50V	J	*
	C1709	NCT03CH-221AY	CHIP CAP.	220 p F	50V	J	*
	C1710-11	NCT03CH-390AY	CHIP CAP.	39 p F	50V	J	*
	C1712	NCT03CH-270AY	CHIP CAP.	27 p F	50V	J	*
	C1713	NCT03CH-150AY	CHIP CAP.	15 p F	50V	J	*
	C1714	NCB21HK-103AY	CHIP CAP.	0.01 μ F	50V	K	*
	C1716	NCB21HK-103AY	CHIP CAP.	0.01 μ F	50V	K	*
	C1717-18	NCT03CH-330AY	CHIP CAP.	33 p F	50V	J	*
	C1720-22	NCB21HK-103AY	CHIP CAP.	0.01 μ F	50V	K	*
	C1723	NCB21HK-102AY	CHIP CAP.	1000 p F	50V	K	*
	C1725	NCB21HK-102AY	CHIP CAP.	1000 p F	50V	K	*
	C1741	QFN31HJ-102ZJ1	M CAP.	1000 p F	50V	J	*
	C1743	NCB21HK-103AY	CHIP CAP.	0.01 μ F	50V	K	*
	C1744	NCT03CH-681AY	CHIP CAP.	680 p F	50V	J	*
	C1772	NCB21HK-103AY	CHIP CAP.	0.01 μ F	50V	K	*
⚠	C1901	QFZ9040-104N	MF CAP.	0.1 μ F	AC275V	M	*
⚠	C1902	QFZ9040-473N	MF CAP.	0.047 μ F	AC275V	M	*
⚠	C1903	QFZ9040-104N	MF CAP.	0.1 μ F	AC275V	M	*
⚠	C1904	QCZ9052-102A	C CAP.	1000 p F	AC125V		*
⚠	C1906	QCZ9033-102A	C CAP.	1000 p F	AC250V	K	*
⚠	C1907	QCZ9033-102A	C CAP.	1000 p F	AC250V	K	*
⚠	C1908	QCZ9033-102A	C CAP.	1000 p F	AC250V	K	*
⚠	C1910	QEZ0169-477	E CAP.	470 μ F	200V	M	*
	C1911	QETC1VM-477Z	E CAP.	470 μ F	35V	M	*
	C1912	QFN31HJ-102ZJ1	M CAP.	100 p F	50V	J	*
	C1913	QCZ0122-222U	C CAP.	2200 p F	2000V	K	*
	C1914	QCZ0122-391A	C CAP.	390 p F	2000V	K	*
	C1918	NCB21HK-102AY	CHIP CAP.	1000 p F	50V	K	*
	C1919	NCB21HK-472AY	CHIP CAP.	4700 p F	50V	K	*
	C1920	QFLC1HJ-823MZ	M CAP.	0.082 μ F	50V	J	*
	C1921-23	QCZ0132-152AZ	C CAP.	1500 p F	500V	K	*
	C1924	QEZ0203-107R	E CAP.	100 μ F	160V		
	C1934	NCB21HK-102AY	CHIP CAP.	1000 p F	50V	K	*

AV-27850(US&CA)

⚠	Symbol No.	Part No.	Part Name	Description	Local
		CAPACITOR			
	C1938	NCT03CH-471AY	CHIP CAP.	470 p F 50V J	*
⚠	C1990-91	QCZ9029-103M	C CAP.	0.01 μ FAC125V M	*
		TRANSFORMER			
	T1131	CELT001-209J3	C.WAVE TRANSF.		*
	T1161	CELT003-109J3	S.I.F.TRANSF.		*
	T1521	CE42034-002	H.DRIVE TRANSF.		*
⚠	T1522	QQH0016-001	H V TRANSF.		*
⚠	T1901	CETS084-001J8	S M T		*
		COIL			
	L1001	CELP059-101Z	PEAKING COIL	100 μ H	*
	L1102	CELP041-R22	PEAKING COIL	0.22 μ H	*
	L1103	CELP041-R68	PEAKING COIL	0.68 μ H	*
	L1104	CELP059-680Z	PEAKING COIL	68 μ H	*
	L1131	CELP059-220Z	PEAKING COIL	22 μ H	*
	L1161	CELP059-680Z	PEAKING COIL	68 μ H	*
	L1162	CELP059-390Z	PEAKING COIL	39 μ H	*
	L1201	CELP059-270Z	PEAKING COIL	27 μ H	*
⚠	L1531	CELL004-001	LINEARITY COIL		*
⚠	L1532	CELC052-821	CHOKE COIL		*
⚠	L1591	CELC901-034J6	HEATER CHOKE		*
	L1701	CELP059-5R6Z	PEAKING COIL	5.6 μ H	*
	L1702	CELP058-100Z	PEAKING COIL	10 μ H	*
	L1771	CELP059-5R6Z	PEAKING COIL	5.6 μ H	*
	L1921	CELC058-820Z	CHOKE COIL		*
	L1922	CELC058-220Z	CHOKE COIL		*
		DIODE			
	D1001	MTZJ36(A)-T2	ZENER DIODE		*
	D1221	MTZJ5.1(B)-T2	ZENER DIODE		*
	D1231-34	1SS133-T2	SI.DIODE		*
	D1421	1N4003-T2	SI.DIODE		*
	D1422	MTZJ75-T2	ZENER DIODE		*
	D1511	MTZJ3.3(A)-T2	ZENER DIODE		*
⚠	D1531	RH3G-C1	SI.DIODE		*
⚠	D1532	RU3AM-LFC4	SI.DIODE		*
	D1533	RGP10J(C1)-T3	SI.DIODE		*
	D1540	MTZJ36(A)-T2	ZENER DIODE		*
	D1541	RH1S-T3	SI.DIODE		*
	D1542	RGP10J(C1)-T3	SI.DIODE		*
	D1544	1SS81-T2	SI.DIODE		*
	D1546	1SR124-400A-T2	SI.DIODE		*
	D1549	MTZJ9.1(B)-T2	ZENER DIODE		*
⚠	D1551	MTZJ7.5S-T2	ZENER DIODE		*
	D1560	1SS133-T2	SI.DIODE		*
	D1601-03	1SS133-T2	SI.DIODE		*
	D1693-94	MTZJ9.1(C)-T2	ZENER DIODE		*
	D1702-04	1SS133-T2	SI.DIODE		*
	D1741-42	1SS133-T2	SI.DIODE		*
	D1771-73	1SS133-T2	SI.DIODE		*
	D1803	1SS133-T2	SI.DIODE		*
	D1804	MTZJ5.1(B)-T2	ZENER DIODE		*
	D1805	1SS133-T2	SI.DIODE		*
	D1809	MTZJ5.1(B)-T2	ZENER DIODE		*
⚠	D1901	D3SBA60-C1	BRIDGE DIODE		*
⚠	D1902	RGP10J(C1)-T3	SI.DIODE		*
	D1903-04	1SS133-T2	SI.DIODE		*
	D1909	MTZJ15(A)-T2	ZENER DIODE		*
	D1910	RGP10J(C1)-T3	SI.DIODE		*
	D1911	1SS133-T2	SI.DIODE		*
	D1912	MTZJ15(A)-T2	ZENER DIODE		*
	D1913	RGP10J(C1)-T3	SI.DIODE		*
	D1921	RU3AM-LFC4	SI.DIODE		*
	D1922	RU3YX-LFC4	SI.DIODE		*

AV-27850(US&CA)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	D I O D E				
	D1923	RGP10J(C1)-T3	SI.DIODE		*
	D1926-27	1SS133-T2	SI.DIODE		*
	D1931	1SS133-T2	SI.DIODE		*
	D1933	1SS133-T2	SI.DIODE		*
	D1941	MTZJ11(A)-T2	ZENER DIODE		*
	D1951	MTZJ7.5S-T2	ZENER DIODE		*
	T R A N S I S T O R				
	Q1101	2SC5083(L-P)-T	SI.TRANSISTOR		*
	Q1131-32	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1161	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1203	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1204-05	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q1231-32	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1521	2SC4212-C1	SI.TRANSISTOR		
⚠	Q1531	2SD2499-LB	SI.TRANSISTOR	H.OUT	*
	Q1541	2SA933S(QR)-T	SI.TRANSISTOR		*
⚠	Q1542	2SC2785(JH)-T	SI.TRANSISTOR		*
	Q1543-44	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1601	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1602	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1603	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1604	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q1671-72	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1683-86	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1701	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1741	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1742	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1743	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1911	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q1921	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1923	2SA1020(Y)-T	SI.TRANSISTOR		*
	Q1924	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1928	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1942-43	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1944	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1951	2SA949(Y)C1-T	SI.TRANSISTOR		*
	I C				
	IC1001	KIA78L05BP-Y	I.C.(MONO-ANA)		*
	IC1101	BA17809T	I.C.(MONO-ANA)		*
	IC1201	TA1242N	I.C.(MONO-ANA)		
	IC1202	TC4066BP	I.C.(DIGI-MOS)		*
⚠	IC1421	LA7832	I.C.		*
⚠	IC1601	LA4485	I.C.(MONO-ANA)		*
	IC1651	UPC1851ACU	I.C.		
	IC1652	BA15218N	I.C.(MONO-ANA)		*
	IC1653	TC4066BP	I.C.(DIGI-MOS)		*
	IC1701	MN1874876JZX	I.C.		
	IC1702	AT24C02-32850	I.C.	(SERVICE)	
	IC1703	MN1381-Q-Y	I.C.(MONO-ANA)		*
	IC1771	KIA78L05BP-Y	I.C.(MONO-ANA)		*
⚠	IC1901	STR-F6515	I.C.(HYBRID)		
⚠	IC1941	SE135N	I.C.(HYBRID)		
	O T H E R S				
	CF1001-02	FTP47.25MF	CERAMIC FILTER		*
	CF1131	CE41505-001	CERAMIC FILTER		*
	CF1161	SFSH4.5MCB	CERAMIC FILTER		*
	CF1501	CSB503F30-T2	CER.RESONATOR		*
	CF1701	FCR12.0M2S	CER.RESONATOR		*
⚠	F1901	QMF0007-5R0J1	FUSE	5.0A	*
	K1421	QQR0582-001Z	BEADS CORE		*
	K1901	CE41433-001Z	BEADS CORE		*

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⚠	Symbol No.	Part No.	Part Name	Description	Local
	TRANSISTOR				
	K1903	CE41433-001Z	BEADS CORE		*
	K1921	CE41433-001Z	BEADS CORE		*
⚠	LF1901	CELF008-001J5	LINE FILTER		*
⚠	LF1902	CE42335-001J1	LINE FILTER		*
⚠	PC1901	TLP621(B)	I.C.(PH.COUPLER)		*
⚠	PC1902	TLP621(B)	I.C.(PH.COUPLER)		*
⚠	RY1901	CESK028-001	RELAY		*
	S1421	QSL6A13-C01	LEVER SWITCH	V.CENTER SW	*
	SF1101	CE42604-201	SAW FILTER		
⚠	TH1901	CEKP007-002	P.THERMISTOR		
⚠	TU1001	CEEM270-A02	TUNER		*
⚠	VA1901	ERZV10V361CS	VARISTOR		*
	X1301	QAX0310-001Z	X-TAL		*
	Y1201	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*

CRT SOCKET PW BOARD ASS'Y (SFK-3001A-M2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R3360-62	QRZ0111-152	C R	1.5kΩ 1/2W	*
	R3363-65	QRG029J-103	OM R	10kΩ 2W J	*
	CAPACITOR				
	C3354-55	NCS21HJ-331AY	CER.CAP.-M	330pF 50V J	*
	C3356	NCS21HJ-391AY	CER.CAP.-M	330pF 50V J	*
⚠	C3382	QCZ0121-102A	C CAP.	1000pF 3kV Z	*
	COIL				
	L3381	CELP055-101Z	PEAKING COIL	100μH	*
	TRANSISTOR				
	Q3351-53	2SC4544-C1	SI.TRANSISTOR		*
	OTHERS				
⚠	SK3351	CE42535-001J1	C.R.T.SOCKET		*

FRONT CONTROL PW BOARD ASS'Y (SFK-4002A-M2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	DIODE				
	D4701	GL2PR6	L.E.D.(RED)		*
	TRANSISTOR				
	Q4701-02	DTA124EKA-X	DIGI.TRANSISTOR		*
	IC				
	IC4841	PIC-21043SR	IR DETECT UNIT		*
	OTHERS				
		CM46978-A01-H	L.E.D.HOLDER		*
	S4702	QSP1A11-C19Z	PUSH SWITCH	MENU	*
	S4703	QSP1A11-C19Z	PUSH SWITCH	CH -	*
	S4704	QSP1A11-C19Z	PUSH SWITCH	CH +	*
	S4705	QSP1A11-C19Z	PUSH SWITCH	VOL -	*
	S4706	QSP1A11-C19Z	PUSH SWITCH	VOL +	*
	S4707	QSP1A11-C19Z	PUSH SWITCH	POWER	*

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AV SELECTOR PW BOARD ASS'Y (SFK-8005A-M2)

⚠ Symbol No.	Part No.	Part Name	Description	Local
VARIABLE RESISTOR				
R8123	QVPA603-473AZ	V R(NOISE VR)	47kΩ B	
RESISTOR				
R8005	QRD14CJ-5R6SX	C R	5.6 Ω 1/4W J	*
R8106	QRD12CJ-101SX	C R	100 Ω 1/2W J	*
R8109	NRVA02D-2200NY	MF R	220 Ω 1/10W±0.5%	*
CAPACITOR				
C8005	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8101-03	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8104	NCB21HK-222AY	CHIP CAP.	2200pF 50V K	*
C8106	NCB21HK-222AY	CHIP CAP.	2200pF 50V K	*
C8107	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8108	NCS21HJ-101AY	CER.CAP.-M	100pF 50V J	*
C8109-10	QFV71HJ-224MZ	TF CAP.	0.22μF 50V J	*
C8111	NCT03CH-390AY	CHIP CAP.	39pF 50V J	*
C8112	NCB21HK-222AY	CHIP CAP.	2200pF 50V K	*
C8115	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8118	QFV71HJ-474MZ	TF CAP.	0.47μF 50V J	*
C8161	QFLC1HJ-104MZ	M CAP.	0.1μF 50V J	*
C8205	NCT03CH-330AY	CHIP CAP.	33pF 50V J	*
C8302	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	*
C8303	NCT03CH-680AY	CHIP CAP.	68pF 50V J	*
C8304	NCT03CH-271AY	CHIP CAP.	270pF 50V J	*
C8305	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8316	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8701	NCT03CH-100AY	CHIP CAP.	10pF 50V J	*
C8702-03	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8704	NCB21HK-333AY	CHIP CAP.	0.033μF 50V K	*
C8705	QETC1HM-225Z	E CAP.	2.2μF 50V M	*
C8706	QFV71HJ-224MZ	TF CAP.	0.22μF 50V J	*
C8708	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8710	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8711	QFLC1HJ-104MZ	M CAP.	0.1μF 50V J	*
C8712-13	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8715	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8716	QFLC1HJ-104MZ	M CAP.	0.1μF 50V J	*
C8717-18	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8720	QEN61HM-335Z	BP E CAP.	3.3μF 50V M	*
C8724	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8726	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8727	NCT03CH-680AY	CHIP CAP.	68pF 50V J	*
C8730	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8731	NCT03CH-151AY	CHIP CAP.	150pF 50V J	*
C8733-34	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8735-36	QFLC1HJ-104MZ	M CAP.	0.1μF 50V J	*
C8737	QFLC1HJ-393MZ	M CAP.	0.039μF 50V J	*
C8738	QFLC1HJ-104MZ	M CAP.	0.1μF 50V J	*
C8739	QFV71HJ-334MZ	TF CAP.	0.33μF 50V J	*
C8741	NCT03CH-120AY	CHIP CAP.	12pF 50V J	*
C8746	QFN31HJ-102ZJ1	M CAP.	100pF 50V J	*
C8747	NCB21HK-153AY	CHIP CAP.	0.015μF 50V K	*
C8829	QEN61HM-106Z	BP E CAP.	10μF 50V M	*
C8832	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	*
C8842	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	*
C8846	QFLC1HJ-223MZ	M CAP.	0.022μF 50V J	*
COIL				
L8003	CELP059-150Z	PEAKING COIL	15μH	*
L8101	CELP041-R22	PEAKING COIL	0.22μH	*
L8103	CE42452-003	COIL		*
L8104	CELP055-220Z	PEAKING COIL	22μH	*
L8105	CELP059-100Z	PEAKING COIL	10μH	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
C O I L				
L8106	CELP059-5R6Z	PEAKING COIL	5.6 μH	*
L8202	CELP059-220Z	PEAKING COIL	22 μH	*
L8301	CELP059-150Z	PEAKING COIL	15 μH	*
L8702-03	CELP059-5R6Z	PEAKING COIL	5.6 μH	*
L8704	CELP055-2R2Z	PEAKING COIL	2.2 μH	*
L8705	CELP055-1R5Z	PEAKING COIL	1.5 μH	*
L8706	CELP059-330Z	PEAKING COIL	33 μH	*
L8801-02	CELP059-5R6Z	PEAKING COIL	5.6 μH	*
D I O D E				
D8311-13	1SS133-T2	SI.DIODE		*
D8701-03	MTZJ5.6(B)-T2	ZENER DIODE		*
D8705-06	1SS133-T2	SI.DIODE		*
D8811-22	MTZJ9.1(C)-T2	ZENER DIODE		*
T R A N S I S T O R				
Q8101	2SC5083(L-P)-T	SI.TRANSISTOR		*
Q8102	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q8202	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8203	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q8204	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8301-03	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8305-06	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8703-07	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8801-02	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8803	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q8804-07	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8851-53	DTC124EKA-X	DIGI.TRANSISTOR		*
I C				
IC8001	KIA7805PI	I.C.(MONO-ANA)		*
IC8101	LA7583	I.C.(MONO-ANA)		*
IC8701	M65617SP	I.C.		
IC8703	BA033T	I.C.		
IC8801	BA7644AN	OP AMP IC		*
IC8802	BA7644AN	I.C.(MONO-ANA)		*
IC8803	TC4066BP	I.C.(DIGI-MOS)		*
O T H E R S				
	CM36337-A01-H	SHIELD COVER		*
	CM36424-001	SHIELD BOTTOM		
CF8102	FCR5.71M2SF3	CER.RESONATOR		*
CF8103	CE41505-001	CERAMIC FILTER		*
CM8201	CE42599-001	COMB FILTER MOD		*
DL8201	CE42464-001	BPF&DL MODULE		*
J8801	QMCC004-C01	MINI DIN JACK		
J8802	QNN0083-001	PIN JACK		*
J8803-04	QMS3003-C01	JACK		*
SF8101	CE42589-201	SAW FILTER		
⚠ TU8001	CEEM270-A02	TUNER		*
X8701	CE40405-001	CRYSTAL(4FSC)		

PRINTED WIRING BOARD PARTS LIST

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MAIN PW BOARD ASS'Y (SFK-1002A-M2)

⚠	Symbol No.	Part No.	Part Name	Description			Local
	RESISTOR						
	R1001	QRD14CJ-5R6SX	C R	5.6 Ω	1/4W	J	*
	R1110	QRG029J-220A	OM R	22 Ω	2W	J	*
	R1423	QRX029J-R82A	MF R	0.82 Ω	2W	J	*
	R1524	QRG039J-182A	OM R	1.8kΩ	3W	J	*
	R1525	QRG039J-152A	OM R	1.5kΩ	3W	J	*
	R1533	QRG039J-103A	OM R	10kΩ	3W	J	*
	R1541	QRD129J-150S	C R	15 Ω	1/2W	J	*
	R1542	QRX029J-6R8	MF R	6.8 Ω	2W	J	*
	R1543	QRG039J-223A	OM R	22kΩ	3W	J	*
	R1544	QRD129J-4R7S	C R	4.7 Ω	1/2W	J	*
⚠	R1556	QRV141F-7321AY	MF R	7.32kΩ	1/4W	F	*
⚠	R1557	QRV141F-2701AY	MF R	2.7kΩ	1/4W	F	*
	R1605	QRX029J-R82A	MF R	0.82 Ω	2W	J	*
	R1637	NRVA02D-1502NY	MF R	15kΩ	1/10W	±0.5%	*
	R1639	NRVA02D-1501NY	MF R	1.5kΩ	1/10W	±0.5%	*
	R1771	QRG019J-820S	OM R	82 Ω	1W	J	*
⚠	R1901	QRF074K-R47	UNF R	0.47 Ω	7W	K	*
	R1904-05	QRX029J-R22A	MF R	0.22 Ω	2W	J	*
	R1923	QRX039J-1R0A	MF R	1.0 Ω	3W	J	*
	R1924	QRG019J-331S	OM R	330 Ω	1W	J	*
	R1926	QRX029J-1R0A	MF R	1 Ω	2W	J	*
	R1951	QRX029J-1R2A	MF R	1.2 Ω	2W	J	*
	R1952	QRX029J-1R0A	MF R	1 Ω	2W	J	*
⚠	R1998	QRZ0111-275U	C R	2.7MΩ	1/2W		*
	CAPACITOR						
	C1006	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1011	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1102	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1104-05	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1106	NCT03CH-560AY	CHIP CAP.	56pF	50V	J	*
	C1107	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1110-11	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1131	QFV71HJ-154MZ	TF CAP.	0.15μF	50V	J	*
	C1132	QFLC1HK-152MZ	M CAP.	1500pF	50V	K	
	C1134	NCB21HK-332AY	CHIP CAP.	3300pF	50V	K	*
	C1135	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1139	NCB21HK-223AY	CHIP CAP.	0.022μF	50V	K	*
	C1162	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1163	NCT03CH-220AY	CHIP CAP.	22pF	50V	J	*
	C1164-65	NCT03CH-470AY	CHIP CAP.	47pF	50V	J	*
	C1166	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1168-70	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1201	QEN61HM-335Z	BP E CAP.	3.3μF	50V	M	*
	C1205	QFV71HJ-104MZ	TF CAP.	0.1μF	50V	J	
	C1208	NCT03CH-680AY	CHIP CAP.	68pF	50V	J	*
	C1226	NCT03CH-681AY	CHIP CAP.	680pF	50V	J	*
	C1228	QFV71HJ-104MZ	TF CAP.	0.1μF	50V	J	
	C1301	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1302	NCT03CH-100AY	CHIP CAP.	10pF	50V	J	*
	C1303	QFLC1HK-223MZ	M CAP.	0.022μF	50V	K	
	C1306	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1402	QEE61CK-225BZ	TAN.CAP.	2.2μF	16V	K	
	C1403	NCB21HK-102AY	CHIP CAP.	1000pF	50V	K	*
	C1421	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1424	QETC1VM-107Z	E CAP.	100μF	35V	M	*
	C1425	QETC1VM-477Z	E CAP.	470μF	35V	M	*
	C1426	QFLC2AK-563MZ	M CAP.	0.056μF	100V	K	*
	C1428	QFV71HJ-684MZ	TF CAP.	0.68μF	50V	J	*
	C1429	QFV71HJ-224MZ	TF CAP.	0.22μF	50V	J	*
	C1503	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*

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⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C1523	QETC2CM-105Z	E CAP.	1μF 160V M	*
⚠ C1531	QFZ0117-3001S	MPP CAP.	3000pF1.4kVH±2.5%	*
⚠ C1532	QFZ0117-1202S	MPP CAP.	0.012μF1.4kVH±2.5%	*
⚠ C1533	QFM72DK-124M	M CAP.	0.12μF 200V K	
C1534	QEHC2EM-225MZ	E CAP.	2.2μF 250V M	*
⚠ C1535	QFZ0119-434S	MPP CAP.	0.43μF 200V ±3%	*
C1538	QEZ0203-107R	E CAP.	100μF 160V	
C1541	QETB2EM-226	E CAP.	22μF 250V M	*
C1542	QETB1VM-108	E CAP.	1000μF 35V M	*
C1544	QETC1VM-107Z	E CAP.	100μF 35V M	*
C1545	QFLC2AJ-103MZ	M CAP.	0.01μF 100V J	*
C1546	QFV71HJ-473MZ	TF CAP.	0.047μF 50V J	
C1578-79	QEM61HK-475MZ	E CAP.	4.7μF 50V K	
C1613	QETC1VM-476Z	E CAP.	47μF 35V M	*
C1622	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	*
C1624	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
C1625	QEN61HM-475Z	BP E CAP.	4.7μF 50V M	*
C1626	QEN61HM-105Z	BP E CAP.	1μF 50V M	*
C1628	QFLC1HK-473MZ	M CAP.	0.047μF 50V K	
C1630-31	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
C1633	QEE61CK-335BZ	TAN.CAP.	3.3μF 16V K	
C1634	QEE61CK-106BZ	TAN.CAP.	10μF 16V K	
C1639	QFLC1HK-273MZ	M CAP.	0.027μF 50V K	
C1641	QFLC1HK-222MZ	M CAP.	2200pF 50V K	
C1642	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
C1644	QFLC1HK-222MZ	M CAP.	2200pF 50V K	
C1645	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
C1651-52	QEN61HM-105Z	BP E CAP.	1μF 50V M	*
C1701-02	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C1704	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C1705	NCT03CH-181AY	CHIP CAP.	180pF 50V J	*
C1709	NCT03CH-221AY	CHIP CAP.	220pF 50V J	*
C1710-11	NCT03CH-390AY	CHIP CAP.	39pF 50V J	*
C1712	NCT03CH-270AY	CHIP CAP.	27pF 50V J	*
C1713	NCT03CH-150AY	CHIP CAP.	15pF 50V J	*
C1714	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C1716	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C1717-18	NCT03CH-330AY	CHIP CAP.	33pF 50V J	*
C1720-22	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C1723	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*
C1725	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*
C1741	QFN31HJ-102ZJ1	M CAP.	1000pF 50V J	*
C1743	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C1744	NCT03CH-681AY	CHIP CAP.	680pF 50V J	*
C1772	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
⚠ C1901	QFZ9040-104N	MF CAP.	0.1μFAC275V M	*
⚠ C1902	QFZ9040-473N	MF CAP.	0.047μFAC275V M	*
⚠ C1903	QFZ9040-104N	MF CAP.	0.1μFAC275V M	*
⚠ C1904	QCZ9052-102A	C CAP.	1000pFAC125V	*
⚠ C1906	QCZ9033-102A	C CAP.	1000pFAC250V K	*
⚠ C1907	QCZ9033-102A	C CAP.	1000pFAC250V K	*
⚠ C1908	QCZ9033-102A	C CAP.	1000pFAC250V K	*
⚠ C1910	QEZ0169-477	E CAP.	470μF 200V M	*
C1911	QETC1VM-477Z	E CAP.	470μF 35V M	*
C1912	QFN31HJ-102ZJ1	M CAP.	100pF 50V J	*
C1913	QCZ0122-222U	C CAP.	2200pF 2000V K	*
C1914	QCZ0122-391A	C CAP.	390pF 2000V K	*
C1918	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*
C1919	NCB21HK-472AY	CHIP CAP.	4700pF 50V K	*
C1920	QFLC1HJ-823MZ	M CAP.	0.082μF 50V J	*
C1921-23	QCZ0132-152AZ	C CAP.	1500pF 500V K	*
C1924	QEZ0203-107R	E CAP.	100μF 160V	

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⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C1934	NCB21HK-102AY	CHIP CAP.	1000 p F 50V K	*
	C1938	NCT03CH-471AY	CHIP CAP.	470 p F 50V J	*
⚠	C1990-91	QCZ9029-103M	C CAP.	0.01 μ FAC125V M	*
	TRANSFORMER				
	T1131	CELT001-209J3	C.WAVE TRANSF.		*
	T1161	CELT003-109J3	S.I.F.TRANSF.		*
	T1521	CE42034-002	H.DRIVE TRANSF.		*
⚠	T1522	QQH0016-001	H V TRANSF.		*
⚠	T1901	CETS084-001J8	S M T		*
	COIL				
	L1001	CELP059-101Z	PEAKING COIL	100 μ H	*
	L1102	CELP041-R22	PEAKING COIL	0.22 μ H	*
	L1103	CELP041-R68	PEAKING COIL	0.68 μ H	*
	L1104	CELP059-680Z	PEAKING COIL	68 μ H	*
	L1131	CELP059-220Z	PEAKING COIL	22 μ H	*
	L1161	CELP059-680Z	PEAKING COIL	68 μ H	*
	L1162	CELP059-390Z	PEAKING COIL	39 μ H	*
	L1201	CELP059-270Z	PEAKING COIL	27 μ H	*
⚠	L1531	CELL004-001	LINEARITY COIL		*
⚠	L1532	CELC052-821	CHOKE COIL		*
⚠	L1591	CELC901-034J6	HEATER CHOKE		*
	L1701	CELP059-5R6Z	PEAKING COIL	5.6 μ H	*
	L1702	CELP058-100Z	PEAKING COIL	10 μ H	*
	L1707	CELP059-5R6Z	PEAKING COIL	5.6 μ H	*
	L1771	CELP059-5R6Z	PEAKING COIL	5.6 μ H	*
	L1921	CELC058-820Z	CHOKE COIL		*
	L1922	CELC058-220Z	CHOKE COIL		*
	DIODE				
	D1001	MTZJ36(A)-T2	ZENER DIODE		*
	D1221	MTZJ5.1(B)-T2	ZENER DIODE		*
	D1231-34	1SS133-T2	SI.DIODE		*
	D1421	1N4003-T2	SI.DIODE		*
	D1422	MTZJ75-T2	ZENER DIODE		*
	D1511	MTZJ3.3(A)-T2	ZENER DIODE		*
⚠	D1531	RH3G-C1	SI.DIODE		*
⚠	D1532	RU3AM-LFC4	SI.DIODE		*
	D1533	RGP10J(C1)-T3	SI.DIODE		*
	D1540	MTZJ36(A)-T2	ZENER DIODE		*
	D1541	RH1S-T3	SI.DIODE		*
	D1542	RGP10J(C1)-T3	SI.DIODE		*
	D1544	1SS81-T2	SI.DIODE		*
	D1546	1SR124-400A-T2	SI.DIODE		*
	D1549	MTZJ9.1(B)-T2	ZENER DIODE		*
⚠	D1551	MTZJ7.5S-T2	ZENER DIODE		*
	D1560	1SS133-T2	SI.DIODE		*
	D1601-03	1SS133-T2	SI.DIODE		*
	D1693-94	MTZJ9.1(C)-T2	ZENER DIODE		*
	D1702-04	1SS133-T2	SI.DIODE		*
	D1741-42	1SS133-T2	SI.DIODE		*
	D1771-73	1SS133-T2	SI.DIODE		*
	D1803	1SS133-T2	SI.DIODE		*
	D1804	MTZJ5.1(B)-T2	ZENER DIODE		*
	D1805	1SS133-T2	SI.DIODE		*
	D1809	MTZJ5.1(B)-T2	ZENER DIODE		*
⚠	D1901	D3SBA60-C1	BRIDGE DIODE		*
⚠	D1902	RGP10J(C1)-T3	SI.DIODE		*
	D1903-04	1SS133-T2	SI.DIODE		*
	D1909	MTZJ15(A)-T2	ZENER DIODE		*
	D1910	RGP10J(C1)-T3	SI.DIODE		*
	D1911	1SS133-T2	SI.DIODE		*
	D1912	MTZJ15(A)-T2	ZENER DIODE		*
	D1913	RGP10J(C1)-T3	SI.DIODE		*

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⚠	Symbol No.	Part No.	Part Name	Description	Local
	TRANSFORMER				
	D1921	RU3AM-LFC4	SI.DIODE		*
	D1922	RU3YX-LFC4	SI.DIODE		*
	D1923	RGP10J(C1)-T3	SI.DIODE		*
	D1926-27	1SS133-T2	SI.DIODE		*
	D1931	1SS133-T2	SI.DIODE		*
	D1933	1SS133-T2	SI.DIODE		*
	D1941	MTZJ11(A)-T2	ZENER DIODE		*
	D1951	MTZJ7.5S-T2	ZENER DIODE		*
	TRANSISTOR				
	Q1101	2SC5083(L-P)-T	SI.TRANSISTOR		*
	Q1131-32	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1161	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1201-03	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1204-05	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q1231-32	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1521	2SC4212-C1	SI.TRANSISTOR		
⚠	Q1531	2SD2499-LB	SI.TRANSISTOR	H.OUT	*
	Q1541	2SA933S(QR)-T	SI.TRANSISTOR		*
⚠	Q1542	2SC2785(JH)-T	SI.TRANSISTOR		*
	Q1543-44	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1601	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1602	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1603	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1604	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q1671-72	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1683-86	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1701	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1741	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1742	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1743	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1911	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q1921	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1923	2SA1020(Y)-T	SI.TRANSISTOR		*
	Q1924	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1928	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1942-43	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1944	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1951	2SA949(Y)C1-T	SI.TRANSISTOR		*
	IC				
	IC1001	KIA78L05BP-Y	I.C.(MONO-ANA)		*
	IC1101	BA17809T	I.C.(MONO-ANA)		*
	IC1201	TA1242N	I.C.(MONO-ANA)		
	IC1202	TC4066BP	I.C.(DIGI-MOS)		
⚠	IC1421	LA7832	I.C.		*
⚠	IC1601	LA4485	I.C.(MONO-ANA)		*
	IC1651	UPC1851ACU	I.C.		
	IC1652	BA15218N	I.C.(MONO-ANA)		*
	IC1653	TC4066BP	I.C.(DIGI-MOS)		*
	IC1701	MN1874876JZX	I.C.		
	IC1702	AT24C02-32850	I.C.	(SERVICE)	
	IC1703	MN1381-Q-Y	I.C.(MONO-ANA)		*
	IC1771	KIA78L05BP-Y	I.C.(MONO-ANA)		*
⚠	IC1901	STR-F6515	I.C.(HYBRID)		
⚠	IC1941	SE135N	I.C.(HYBRID)		
	OTHERS				
	CF1001-02	FTP47.25MF	CERAMIC FILTER		*
	CF1131	CE41505-001	CERAMIC FILTER		*
	CF1161	SFSH4.5MCB	CERAMIC FILTER		*
	CF1501	CSB503F30-T2	CER.RESONATOR		*
	CF1701	FCR12.0M2S	CER.RESONATOR		*
⚠	F1901	QMF0007-5R0J1	FUSE	5.0A	*
	K1421	QQR0582-001Z	BEADS CORE		*
	K1901	CE41433-001Z	BEADS CORE		*

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⚠	Symbol No.	Part No.	Part Name	Description	Local
	OTHERS				
	K1903	CE41433-001Z	BEADS CORE		*
	K1921	CE41433-001Z	BEADS CORE		*
⚠	LF1901	CELF008-001J5	LINE FILTER		*
⚠	LF1902	CE42335-001J1	LINE FILTER		*
⚠	PC1901	TLP621(B)	I.C.(PH.COUPLER)		*
⚠	PC1902	TLP621(B)	I.C.(PH.COUPLER)		*
⚠	RY1901	CESK028-001	RELAY		*
	S1421	QSL6A13-C01	LEVER SWITCH	V.CENTER SW	*
	SF1101	CE42604-201	SAW FILTER		
⚠	TH1901	CEKP007-002	P.THERMISTOR		
⚠	TU1001	CEEM270-A02	TUNER		*
⚠	VA1901	ERZV10V361CS	VARISTOR		*
	X1301	QAX0310-001Z	X-TAL		*
	Y1201	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*

CRT SOCKET PW BOARD ASS'Y (SFK-3001A-M2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R3360-62	QRZ0111-152	C R	1.5kΩ 1/2W	*
	R3363-65	QRG029J-103	OM R	10kΩ 2W J	*
	CAPACITOR				
	C3354-55	NCS21HJ-331AY	CER.CAP.-M	330pF 50V J	*
	C3356	NCS21HJ-391AY	CER.CAP.-M	330pF 50V J	*
⚠	C3382	QCZ0121-102A	C CAP.	1000pF 3kV Z	*
	COIL				
	L3381	CELP055-101Z	PEAKING COIL	100μH	*
	TRANSISTOR				
	Q3351-53	2SC4544-C1	SI.TRANSISTOR		*
	OTHERS				
⚠	SK3351	CE42535-001J1	C.R.T.SOCKET		*

FRONT CONTROL PW BOARD ASS'Y (SFK-4002A-M2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	DIODE				
	D4701	GL2PR6	L.E.D.(RED)		*
	TRANSISTOR				
	Q4701-02	DTA124EKA-X	DIGI.TRANSISTOR		*
	IC				
	IC4841	PIC-21043SR	IR DETECT UNIT		*
	OTHERS				
		CM46978-A01-H	L.E.D.HOLDER		*
	S4702	QSP1A11-C19Z	PUSH SWITCH	MENU	*
	S4703	QSP1A11-C19Z	PUSH SWITCH	CH -	*
	S4704	QSP1A11-C19Z	PUSH SWITCH	CH +	*
	S4705	QSP1A11-C19Z	PUSH SWITCH	VOL -	*
	S4706	QSP1A11-C19Z	PUSH SWITCH	VOL +	*
	S4707	QSP1A11-C19Z	PUSH SWITCH	POWER	*

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AV SELECTOR PW BOARD ASS'Y (SFK-8003A-M2)

⚠ Symbol No.	Part No.	Part Name	Description	Local
VARIABLE RESISTOR				
R8123	QVPA603-473AZ	V R(NOISE VR)	47kΩ B	
RESISTOR				
R8005	QRD14CJ-5R6SX	C R	5.6 Ω 1/4W J	*
R8106	QRD12CJ-101SX	C R	100 Ω 1/2W J	*
R8109	NRVA02D-2200NY	MF R	220 Ω 1/10W ± 0.5%	*
CAPACITOR				
C8005	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8101-03	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8104	NCB21HK-222AY	CHIP CAP.	2200 p F 50V K	*
C8106	NCB21HK-222AY	CHIP CAP.	2200 p F 50V K	*
C8107	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8108	NCS21HJ-101AY	CER.CAP.-M	100 p F 50V J	*
C8109-10	QFV71HJ-224MZ	TF CAP.	0.22 µF 50V J	*
C8111	NCT03CH-390AY	CHIP CAP.	39 p F 50V J	*
C8112	NCB21HK-222AY	CHIP CAP.	2200 p F 50V K	*
C8115	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8118	QFV71HJ-474MZ	TF CAP.	0.47 µF 50V J	*
C8161	QFLC1HJ-104MZ	M CAP.	0.1 µF 50V J	*
C8205	NCT03CH-330AY	CHIP CAP.	33 p F 50V J	*
C8302	QFLC1HJ-103MZ	M CAP.	0.01 µF 50V J	*
C8303	NCT03CH-680AY	CHIP CAP.	68 p F 50V J	*
C8304	NCT03CH-271AY	CHIP CAP.	270 p F 50V J	*
C8305	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8316	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8701	NCT03CH-100AY	CHIP CAP.	10 p F 50V J	*
C8702-03	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8704	NCB21HK-333AY	CHIP CAP.	0.033 µF 50V K	*
C8705	QETC1HM-225Z	E CAP.	2.2 µF 50V M	*
C8706	QFLC1HK-224MZ	M CAP.	0.22 µF 50V K	
C8708	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8710	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8711	QFLC1HJ-104MZ	M CAP.	0.1 µF 50V J	*
C8712-13	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8715	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8716	QFLC1HJ-104MZ	M CAP.	0.1 µF 50V J	*
C8717-18	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8720	QEN61HM-335Z	BP E CAP.	3.3 µF 50V M	*
C8724	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8726	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8727	NCT03CH-680AY	CHIP CAP.	68 p F 50V J	*
C8730	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8731	NCT03CH-151AY	CHIP CAP.	150 p F 50V J	*
C8733-34	NCB21HK-103AY	CHIP CAP.	0.01 µF 50V K	*
C8735-36	QFLC1HJ-104MZ	M CAP.	0.1 µF 50V J	*
C8737	QFLC1HJ-393MZ	M CAP.	0.039 µF 50V J	*
C8738	QFLC1HJ-104MZ	M CAP.	0.1 µF 50V J	*
C8739	QFV71HJ-334MZ	TF CAP.	0.33 µF 50V J	*
C8741	NCT03CH-120AY	CHIP CAP.	12 p F 50V J	*
C8746	QFN31HJ-102ZJ1	M CAP.	100 p F 50V J	*
C8747	NCB21HK-153AY	CHIP CAP.	0.015 µF 50V K	*
C8829	QEN61HM-106Z	BP E CAP.	10 µF 50V M	*
C8832	QFLC1HJ-103MZ	M CAP.	0.01 µF 50V J	*
C8842	QFLC1HJ-103MZ	M CAP.	0.01 µF 50V J	*
C8846	QFLC1HJ-223MZ	M CAP.	0.022 µF 50V J	*
COIL				
L8003	CELP059-150Z	PEAKING COIL	15 µH	*
L8101	CELP041-R22	PEAKING COIL	0.22 µH	*
L8103	CE42452-003	COIL		*
L8104	CELP055-220Z	PEAKING COIL	22 µH	*
L8105	CELP059-100Z	PEAKING COIL	10 µH	*
L8106	CELP059-5R6Z	PEAKING COIL	5.6 µH	*

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⚠	Symbol No.	Part No.	Part Name	Description	Local
	C O I L				
	L8202	CELP059-220Z	PEAKING COIL	22 µH	*
	L8301	CELP059-150Z	PEAKING COIL	15 µH	*
	L8702-03	CELP059-5R6Z	PEAKING COIL	5.6 µH	*
	L8704	CELP055-2R2Z	PEAKING COIL	2.2 µH	*
	L8705	CELP055-1R5Z	PEAKING COIL	1.5 µH	*
	L8706	CELP059-330Z	PEAKING COIL	33 µH	*
	L8801-02	CELP059-5R6Z	PEAKING COIL	5.6 µH	*
	D I O D E				
	D8311-13	1SS133-T2	SI.DIODE		*
	D8701-03	MTZJ5.6(B)-T2	ZENER DIODE		*
	D8705-06	1SS133-T2	SI.DIODE		*
	D8811-22	MTZJ9.1(C)-T2	ZENER DIODE		*
	T R A N S I S T O R				
	Q8101	2SC5083(L-P)-T	SI.TRANSISTOR		*
	Q8102	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q8202	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q8203	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q8204	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q8301-03	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q8305-06	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q8703-07	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q8801-02	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q8803	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q8804-07	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q8851-53	DTC124EKA-X	DIGI.TRANSISTOR		*
	I C				
	IC8001	KIA7805PI	I.C.(MONO-ANA)		*
	IC8101	LA7583	I.C.(MONO-ANA)		*
	IC8701	M65617SP	I.C.		
	IC8703	BA033T	I.C.		
	IC8801	BA7644AN	OP AMP IC		*
	IC8802	BA7644AN	I.C.(MONO-ANA)		*
	IC8803	TC4066BP	I.C.(DIGI-MOS)		*
	O T H E R S				
		CM36337-A01-H	SHIELD COVER		*
		CM36424-001	SHIELD BOTTOM		
	CF8102	FCR5.71M2SF3	CER.RESONATOR		*
	CF8103	CE41505-001	CERAMIC FILTER		*
	CM8201	CE42599-001	COMB FILTER MOD		*
	DL8201	CE42464-001	BPF&DL MODULE		*
	J8801	QMCC004-C01	MINI DIN JACK		
	J8802	QNN0083-001	PIN JACK		*
	J8803-04	QMS3003-C01	JACK		*
	SF8101	CE42589-201	SAW FILTER		
⚠	TU8001	CEEM270-A02	TUNER		*
	X8701	CE40405-001	CRYSTAL(4FSC)		

FRONT AV JACK PW BOARD ASS'Y (SFK0J001A-M2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C A P A C I T O R				
	CN000F	CH41170-006	EH POST HEADER		
	O T H E R S				
	J0001	QNN0079-001	PIN JACK		

PACKING PARTS LIST

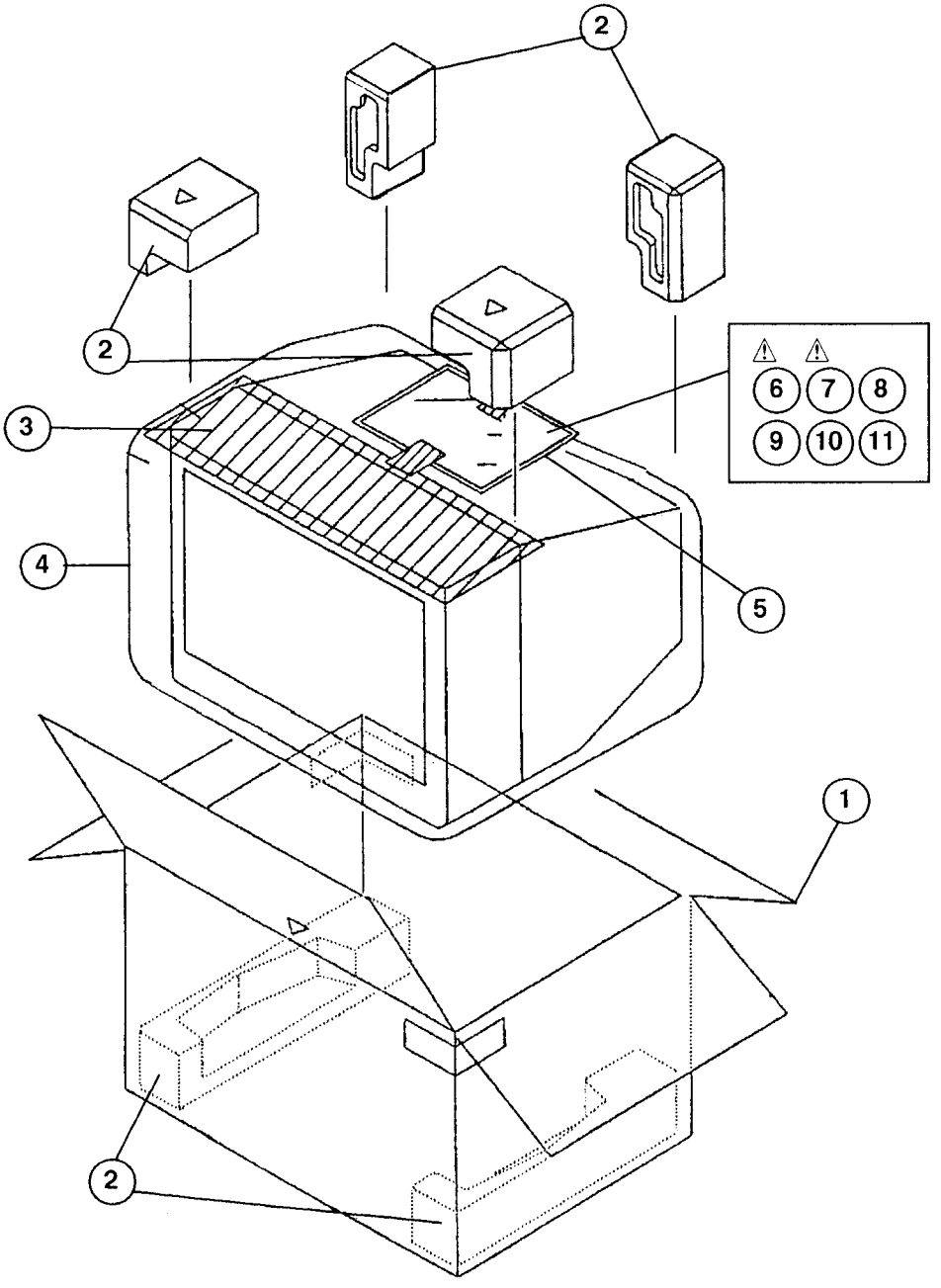
[*AV-27850(US&CA)*]

⚠	Symbol No.	Part No.	Part Name	Description	Local
[*America model*]					
	1	CP11499-016-A	PACKING CASE		*
	2	CP11616-00B-A	CUSHION ASSY	6pcs in 1set	*
	3	CP30055-001-A	TOP COVER		*
	4	CP30056-008-A	POLY BAG		*
	5	QPGA025-03505A	POLY BAG		*
⚠	6	CQ40343-001-A	INST BOOK	(ENGLISH)	*
	8	RM-C745-1C	REMOCON UNIT		*
	9	BT-51006-1Q	REGISTER CARD		*
[*Canada model*]					
	1	CP11499-016-A	PACKING CASE		*
	2	CP11616-00B-A	CUSHION ASSY	6pcs in 1set	*
	3	CP30055-001-A	TOP COVER		*
	4	CP30056-008-A	POLY BAG		*
	5	QPGA025-03505A	POLY BAG		*
⚠	6	CQ40343-001-A	INST BOOK	(ENGLISH)	*
⚠	7	CQ40344-001-A	INST BOOK	(FRENCH)	*
	8	RM-C745-1C	REMOCON UNIT		*
	10	BT-52002-1Q	WARRANTY CARD		*
	11	BT-20071B-Q	SVC CENTER LIST		*

[*AV-27870(US&CA)*]

⚠	Symbol No.	Part No.	Part Name	Description	Local
[*America model*]					
	1	CP11499-016-A	PACKING CASE		*
	2	CP11616-00B-A	CUSHION ASSY	6pcs in 1set	*
	3	CP30055-001-A	TOP COVER		*
	4	CP30056-008-A	POLY BAG		*
	5	QPGA025-03505A	POLY BAG		*
⚠	6	CQ40334-001-A	INST.BOOK	(ENGLISH)	*
	8	RM-C885-1A	REMOCON UNIT		*
	9	BT-51006-1Q	REGISTER CARD		*
[*Canada model*]					
	1	CP11499-016-A	PACKING CASE		*
	2	CP11616-00B-A	CUSHION ASSY	6pcs in 1set	*
	3	CP30055-001-A	TOP COVER		*
	4	CP30056-008-A	POLY BAG		*
	5	QPGA025-03505A	POLY BAG		*
⚠	6	CQ40334-001-A	INST.BOOK	(ENGLISH)	*
⚠	7	CQ40335-001-A	INST.BOOK	(FRENCH)	*
	8	RM-C885-1A	REMOCON UNIT		*
	10	BT-52002-1Q	WARRANTY CARD		*
	11	BT-20071B-Q	SVC CENTER LIST		*

PACKING



REMOTE CONTROL UNIT

[AV-27850(US&CA)] **[RM-C745-1C]**

⚠ Symbol No.	Part No.	Part Name	Description	Local
	2AA015250	BATTERY COVER		*

[AV-27870(US&CA)] **[RM-C885-1A]**

⚠ Symbol No.	Part No.	Part Name	Description	Local
	103RRC-AAA-01R	BATTERY COVER		*

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